THE BOOT AND SHOE INDUSTRY IN MASSACHUSETTS AS A VOCATION FOR WOMEN

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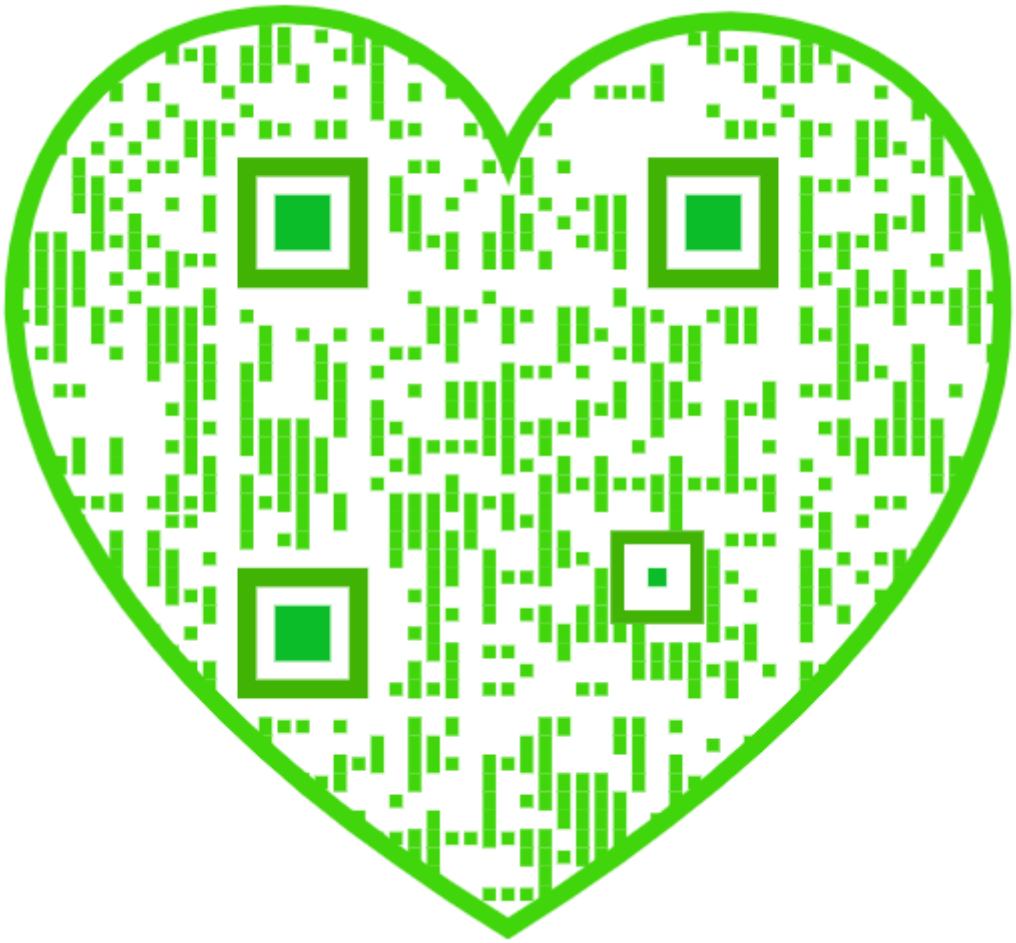

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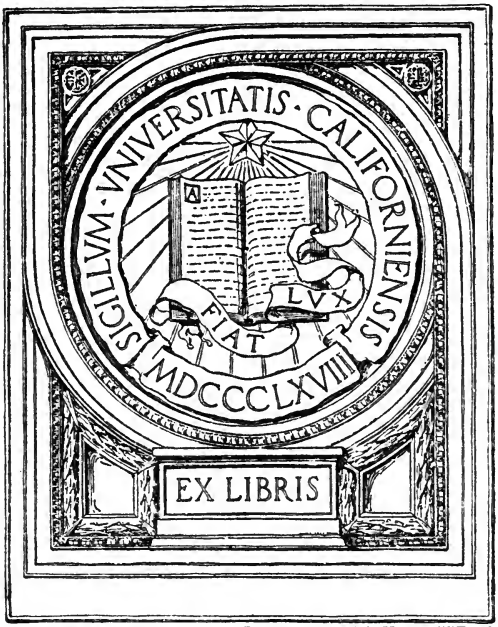
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VOLUME VI

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BUREAU OF LABOR STATISTICS
ROYAL MEEKER, Commissioner

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THE BOOT AND SHOE INDUSTRY IN MASSACHUSETTS AS A VOCATION FOR WOMEN

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This report is the result of an investigation made in the year 1911–12 by Miss Ruth Evans, Miss Florence Murphy, and Miss Abigail Steere, fellows of the department of research of the Women's Educational and Industrial Union, Boston, Mass., under the supervision of Miss May Allinson, associate director. During the following year the material collected was compiled and edited by Miss Lila Ver Planck North, assistant director. The entire work was carried on under the direction of Dr. Susan M. Kingsbury, director of the department of research.

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U. S. BUREAU OF LABOR STATISTICS.

WHOLE NO. 180. WASHINGTON. OCTOBER, 1915.

THE BOOT AND SHOE INDUSTRY IN MASSACHUSETTS AS A VOCATION FOR WOMEN.

CHAPTER I.—PURPOSE AND METHODS OF THE STUDY.

The present investigation of conditions in the Massachusetts shoe industry was undertaken with the hope of obtaining first-hand knowledge with regard to certain aspects of an occupation long held to be exceptionally desirable for wage-earning women. The work of women has been so long an important factor in the evolution of shoemaking that the industry has special interest in connection with inquiries as to the advantages a long-established factory trade offers to women at the present time. The number employed emphasizes the importance of the study. More women work at shoemaking in Massachusetts than at any other factory trade except the textile industries. The influence of the shoe-factory work upon women is far-reaching not only in any special community but throughout the State. To understand something of this influence it is necessary to make a brief survey of the industry as a whole. The causes behind certain of its conditions are often obscure, but as often powerfully influential. They lie in the general organization of the industry, in its methods of production, and especially in the variation found in the character, population, and social ideals of its chief centers. Further, in the inevitable discussion of hours, work, and wages there must not be ignored the query as to whether the conditions encountered by women in this occupation conduce to their moral and social well-being and tend to promote their fitness for their vocation as home makers for the State.

PRESENT EXTENT OF THE INDUSTRY.

Shoemaking is an industry of no small or recent growth; from its humble beginnings in the first half of the seventeenth century it has come to employ in the United States, according to the census of 1910, 185,000 people and to show an invested capital of nearly $200,000,000.[1] Massachusetts alone employed in the year 1911 an average number of 80,000 workers, representing nearly half the total number for the country at large. If to these figures be added those for workers employed in the closely allied boot and shoe stock and shoe findings trades we have a total of nearly 90,000. This first place as a shoe-producing State has been maintained by Massachusetts for nearly three hundred years; and throughout two of these centuries women have been closely connected with the industry.

DISTRIBUTION OF MASSACHUSETTS SHOE TOWNS.

The modern status of shoe manufacturing in Massachusetts acquires a living interest if the statistics of the industry are for a time neglected and we turn to a map of the State upon which all its shoemaking towns are marked. As the traveler eastward from New York or Albany crosses, at Springfield, the Connecticut River and follows through the southern section of Worcester County the sinuous course of the Boston & Albany Railroad, shoemaking towns are found scattered along the main line or on branches leading to the north or south. A small cluster is located in the narrowed southern end of Middlesex County up to within about 15 miles of Boston. In the thickly settled suburban district lying west and southwest of the "Hub," shoe towns are lacking, but within the area inclosed by a five-mile circle drawn from the statehouse as a center, there are, besides Boston itself, five other towns in which are one or more shoe factories. The seaboard counties north and south of Massachusetts Bay constitute, however, the true shoe-town area. On the north Essex, Suffolk, and the eastern portion of Middlesex counties are thickly dotted with shoemanufacturing cities and towns as far as the mouth of the Merrimac; on the south a large irregular cluster straggles from the coast of Norfolk County down through Plymouth and Bristol counties to reach its southern limit at New Bedford, more than 50 miles from Boston. Outside of these distinctly marked areas a few factories are operated in five or six widely separated towns situated in the northern section of the State, with North Adams in the Berkshire Hills at the end of the line. Not a single shoe factory marks the course of the Connecticut River through the State, while the people living in the great southwestern section buy but make no shoes.

[1] Thirteenth Census, Vol. X, Manufactures, p. 697.

TABLE 1.—SHOE FACTORIES AS DISTRIBUTED IN MASSACHUSETTS TOWNS AND COUNTIES IN 1911.

[Based on Trade Directory.]

County.	Number of towns with shoe factories.	Number of factories.
Essex	14	307
Plymouth	7	56
Middlesex	14	42
Worcester	12	23
Suffolk	3	22
Norfolk	9	17
Bristol	3	3
Berkshire	1	2
Hampshire	1	1
Franklin	1	1
Total	65	474

BEGINNING AND GROWTH OF THE INDUSTRY IN MASSACHUSETTS.

The very large number of towns and factories noted in Table 1 in the four seaboard counties, Essex, Suffolk, Norfolk, and Plymouth, is directly related to the historical beginning and growth of shoe manufacturing in Massachusetts. The industry appears to have begun in Salem, where Thomas Beard and Isaac Rickerman settled in 1629, coming on the *Mayflower* on her second voyage. They were shoemakers by trade, and are the earliest shoemakers of record in this country. Another pioneer shoemaker was Philip Kertland, who settled in Lynn in 1636, and who became so notably successful as a producer and instructor in the trade that 15 years later he was largely supplying Boston's demand for shoes, employing in his home shop a number of journeymen "cordwainers," as the shoemakers were then termed. Others instructed by him took up the work in Salem and adjacent towns. In Boston, meanwhile, James Everell built up a large business in making shoes to order, employing and teaching journeymen for nearly 50 years. A contemporary in the same trade was William Copp, in North Boston, for whom is named Copp's Hill. The rapid growth in importance of this distinctive New England industry is shown by the incorporation by the general court as early as 1648 of the "Boston Company of Shoemakers."

Shoemaking retained for 100 years after its establishment in the new land the methods which had been in use for centuries in Europe. The shoemaker sat on his bench or "seat," cut with a knife the upper and sole leather from the hide, stitched the upper with awl and waxed end, hammered the sole on a lapstone, and sewed it on by hand, turning out a complete shoe with few tools other than hammer, awl, and knife and the wooden shoulder stick with which he finished the edges.

The fact that shoemaking was, after its early itinerant period, carried on in the home or in a shop closely connected with the home, made it natural for women to take a share in a process which required the needle and thread as well as the cutting board and the knife. In the seaboard towns along the North Shore of Massachusetts women worked at stitching and binding the shoes while their men were out on the fishing grounds; and in the long stormy days of winter the whole family united in finishing the ordered product or preparing certain patterns as stock.

The latter part of the seventeenth century ushered in the beginnings of the factory system. "Shoes being made by the size, the constant complaint was that sizes were unfairly marked; no two shoemakers had the same measure. * * * William Newman, of Stamford, Conn., had a measuring stick which he had brought from England, which it was decided by the general court was a fair measure between buyer and seller, and in 1658 this was made the standard. Simple as this would seem, it worked a revolution in the business. Once a standard of sizes was fixed upon individual orders and measures were no longer depended upon solely, but enterprising shoemakers began to make up a stock of shoes. By 1700 the more enterprising had gathered groups of workmen around them and began what would be fairly called the manufacture of boots and shoes. The entire shoe was made under one roof, but no longer by one man."[1] In Randolph, Abington, Holbrook, and Quincy, in the Old Colony; in Lynn, Salem, Topsfield, Georgetown, and Haverhill, in Essex County; in Stoneham, Reading, and Marlboro, in Middlesex County; and in Milford, Brookfield, and Spencer, in Worcester County, shoemakers hired a few of their fellows and gathered them into what was then called a shop, one cutting the leather, others fitting or sewing the uppers together, and still others putting the uppers and soles together, or 'bottoming' them, in much the same fashion as that used when each shoemaker worked individually.

"The partial division of labor was a success at once, and soon the uppers were sent out to women and children to be stitched together and bound. Little 'eight-by-ten' shops were scattered all through the 'South Shore,' as Plymouth County was then termed, as well as through Essex, Middlesex, and Worcester counties. The shoemaker with his sons, and perhaps a neighbor, made a 'team' which took the fitted uppers and the understock from the manufacturer in a near-by town and bottomed the shoes or boots. One did the lasting, another the pegging (the boys, and sometimes the girls, were taught this branch), another the trimming, and still another the edge setting; but all was done by hand. When the shoes were made they were taken to the factory, which, although considered at that

[1] Ethelbert Stewart, Old-Time Shoemakers, in Chicago Daily News, 1902.

time a wonder, was little larger than the offices of some of our modern establishments. Here they were finished, packed in wooden boxes, and sent to the market."[1]

Lynn soon became the center of this system, and sent out the cut parts of shoes to small shops throughout Massachusetts to be made up. In Lynn the cutters and other skilled workmen got 60 to 75 cents a day. The heels were wooden; the soles were sometimes fastened with copper brads but usually were sewed, the heavier ones welted, the lighter ones turned. By 1754 the piece price had risen to 60 cents a pair, and wages by the week were $3.25. This was probably for the less skilled operatives, however.

In 1795 Lynn had 200 master shoemakers and 600 journeymen and apprentices. Their combined output was 300,000 pairs of women's shoes a year.

In the winter time, on many of the farms surrounding shoe centers, shoes were bound and stitched by the women at home and lasted and pegged by the men. All the work was handwork; even the wooden peg, invented in 1815—the first machine-made part of the shoe—was driven by hand, the shoe-pegging machine patented a few years later meeting with little patronage. Many of the shoe centers, stretching from Boston east through Middlesex and Worcester counties and south through Plymouth County, date from this period, and have been making shoes from the early part of the eighteenth century. An extraordinary census taken in Massachusetts in 1837 showed 15,366 women employed by establishments making boots and shoes, while but 14,757 women were in the cotton mills. Few of the women shoe workers were, however, in the factory itself; their work was done at home.

When in 1846 Elias Howe, of Boston, invented the sewing machine, he doubtless had in mind relief for the busy housewife, but some years later his invention was utilized in the shoemaking shops for the stitching of uppers. The various processes of shoemaking were now for the first time gathered under one roof, and the "factory" system as applied to this particular manufacture was complete. The heavy machines worked by foot, sometimes by horsepower, could be managed only by men. This fact for a time threw women out of the industry, since the work on uppers, for more than a century largely turned over to them, was now done in the factory by men. Among women long accustomed to depend on this work as a means of supplementing personal or family income the distress was acute and was emphasized on the platform and in the pulpit of the time as among the social disasters consequent on the introduction of machinery into manufacture. "Hannah at the window binding

[1] Wm. B. Rice, One Hundred Years of American Commerce, Vol. II, 1895.

shoes" was as shamefully underpaid as was her sister stitching shirts, but Hannah without shoes to bind was not paid at all. With the gradual perfection of the single-process system in the factories through progressive inventions dividing and simplifying each step in the building of a shoe, women slowly regained a place in the trade. By the year 1860 the stitching machines were universally attached to power belts driven by water or steam, and as they no longer required great strength in manipulation they could be worked by girls or women, who would take lower wages than men. Numerous supplementary and preparatory processes were evolved demanding little skill, but nimble motions; these were taken from the well-paid worker and turned over to girls and untrained women.

WOMEN IN THE INDUSTRY.

The increase in the percentage of women employed in shoe factories throughout the United States can be shown only for recent decades owing to the unspecialized statistical methods formerly employed; but the last 40 years, though showing no phenomenal gain in the total number of wage earners employed, have been marked by a steady growth in the proportion of women workers.

TABLE 2.—NUMBER AND PER CENT OF WAGE EARNERS OF EACH SEX IN THE SHOE INDUSTRY IN THE UNITED STATES, 1880 TO 1910.

[Source: Reports of the United States Census Office: 1880, Vol. II; 1890, Vol. XI; 1900, Vol. IX; 1910, Vol. X.]

Year.	Total number.	Adult males.		Adult females.		Minors (under 16).	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1880	111,152	82,547	74.3	25,122	22.6	3,483	3.1
1890	133,690	91,406	68.3	39,849	29.8	2,435	1.8
1900	142,922	91,215	63.8	47,186	33.0	4,521	3.2
1910	211,507	132,411	62.6	70,457	33.3	8,639	4.1

The ratios for the same period in Massachusetts do not differ materially from those for the country at large. In the 40 years succeeding the beginning of the Civil War in 1861 the gain in numbers of women shoe workers was rapid. Not only in the Revolution but in the Civil War the Army shoes were made in Massachusetts; women compelled to eke out the scanty pay sent home from the Army stitched at the shoes destined for husbands and brothers in the field. The habit of working in the shoe factory was not broken by the close of the war; in 1870, 20 per cent of the shoe workers in Massachusetts were women and girls; in 1900 this had grown to nearly 32 per cent. In the past ten or twelve years, though there has been a large growth in actual numbers, the proportion of women has shown little increase. The subjoined table gives recent figures for the proportion of women wage earners in all branches of the Massachu-

setts shoe industry in 1910 and 1911, and illustrates the comparatively slight changes from year to year.

TABLE 3.—NUMBER AND PER CENT OF WAGE EARNERS OF EACH SEX IN MASSACHUSETTS SHOE INDUSTRY IN 1910 AND 1911.

[Source: Massachusetts Bureau of Statistics, Twenty-fifth and Twenty-sixth Annual Reports on the Statistics of Manufactures, 1910 and 1911.]

Industry.	1910					1911				
	Male.		Female.		Total.	Male.		Female.		Total.
	Number.	Per cent.	Number.	Per cent.		Number.	Per cent.	Number.	Per cent.	
Boots and shoes	50,536	65.6	26,464	34.4	77,000	51,949	65.3	27,593	34.7	79,542
Boot and shoe findings	2,931	68.0	1,378	32.0	4,309	2,932	66.7	1,461	33.3	4,393
Boot and shoe cut stock	2,754	73.2	1,010	26.8	3,764	2,813	73.4	1,019	26.6	3,832
Total	56,221	66.1	28,852	33.9	85,073	57,694	65.7	30,073	34.3	87,767

The above shows the sex division of all shoe workers regardless of age. Among the minors the boys and girls are nearly equal in number. An enumeration of wage earners employed December 16, 1911, showed that of 6,219 under 18 years of age, 3,019 were boys and 3,200 girls.[1] The age and sex distribution of the wage earners in boot and shoe factories was: Men, 61.3 per cent; women, 31.3 per cent; boys under 18 years of age, 3.6 per cent; girls under 18 years of age, 3.8 per cent. The per cent of minors for Massachusetts is in excess of that reported for the whole country in Table 2, since the Massachusetts State reports class as minors persons under 18, while the Federal reports count only those under 16. The statistics for several years back show, in Massachusetts as well as in the country at large, a small but increasing per cent of "young people" in the shoe factories. Shoemaking still remains, however, as compared with nearly all other factory trades, preeminently a business for adults.

METHODS OF INQUIRY.

For the present inquiry there were selected for special study representative groups of shoe workers. Four shoe centers were chosen for investigation, each distinct in its physical environment, its social conditions, and its relation to labor organization. These were Lynn and its neighbor towns of the North Shore, where the industry is organized into many separate unions; Brockton and its allied group of towns on the south, all in the control of one union; Boston, where the industry is conducted in a large competitive unorganized labor market; and Marlboro in Worcester County on the west, where, as

[1] Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, p. 86.

in the adjacent towns, the labor is unorganized, but the shoe factory is the chief employer of labor. The four localities selected employ 68 per cent of the wage earners of the State and produce 75 per cent of the annual output of pairs of shoes. One important center in the northeast, comprising Haverhill, Newburyport, and several other shoemaking towns, is not included in this study.

In all, 80 factories were visited in the four localities. For certain of these the weekly pay rolls, giving the wages paid to over 4,400 women shoe operatives, were copied. The majority of the pay-roll records covered the 12 months from September, 1910, to August, 1911, inclusive, but some statistics were secured the following year, covering the period September, 1911, to August, 1912, inclusive. The number and location of the factories from which pay-roll records were obtained are shown in the following table:

TABLE 4.—DISTRIBUTION OF FACTORIES FROM WHICH PAY-ROLL RECORDS WERE SECURED.

Place.	Number of factories.	Number of individuals.
Boston and Chelsea	4	965
Brockton and vicinity	6	978
Marlboro	2	642
Lynn and Beverly	6	1,851
Total	18	4,436

In addition to this pay rolls were obtained for 157 boy minors and 213 adult men workers, the pay rolls for the men being obtained only where the men were employed at the same tasks as women.

Considerable variation was shown in the percentage of women wage earners in the several groups, the Lynn center ranking highest, the Brockton center lowest. The causes of this variation will be taken up in discussing the special groups, but it is proper to state here that the ratio for each locality has been fairly constant for a series of years.

The value of any partial data in connection with an industrial study is obviously dependent on its representative character. With this in mind, special care was used to secure in the factories studied a variety of types, not only as to the kind and amount of product, but as to other conditions. Among the 18 factories selected for special inquiry are some employing exclusively union labor; others will have none of it; others still admit union and nonunion workers alike. The character of the management ranges from a high type of altruism to greedy commercialism; the systems of manufacture also vary. The presentation of data is thus believed to represent general conditions fairly.

The investigators met the usual difficulty of accurately filling in the schedules. The editor of certain data obtained for the United States Census remarks on the unreliability of most statements made by factory officials as to number of wage earners or amount of earnings. The present inquiry made it clear that superintendents or managers as a rule can give only approximate figures on these points, usually erring in the direction of exaggeration of the numbers employed and the wages paid. Only from the pay rolls of the concerns could this uncertain information be checked and accurate information secured as to seasons, wages, shifting, and other facts.

Neither pay rolls nor managers, however, give much information about the physical conditions under which a woman works. The size and sanitary condition of the workroom, the adequacy and character of the toilets, dressing rooms, and lunch rooms, were learned through personal inspection. From these three main sources—the statements of employers and wage earners, the records, and the notes from personal inspection—was gained a knowledge fairly complete and accurate, so far as the workers' direct connection with the factory is concerned.

In addition, social information in regard to the wage earners was secured by visits to 300 women workers in their homes, visits made in part with the hope of finding out the causes of time out of work or of the unusually high or low pay of certain periods of employment. Of importance, too, was the knowledge gained of the general character of women shoe operatives. In some cases the investigator learned much of these matters and of the real adequacy of the factory wage as a means of supplying the necessaries and comforts of life, by living in the same households with the women, by hearing and sharing their casual talk of the shop and its incidents, and by joining in their recreation and other interests; in short, by being accepted as one of them. Additional enlightenment was gained from meeting those who touch closely the lives of these women—their families, priests, ministers, and doctors. From these varied sources it is possible to paint in the background of social conditions against which the shoe operatives play their daily part as producers and wage earners.

CHAPTER II.—THE SHOE CENTERS AND THE SHOE WORKERS.

LYNN AND THE NORTH SHORE SHOE TOWNS.

In any view of the shoemaking industry the towns of the North Shore of Massachusetts take the first place in history and in interest. Two of the shoe towns—Newburyport and Haverhill—which together employ 12,500 shoe operatives, this study must largely neglect.

In six of the North Shore towns—Lynn, Salem, Beverly, Marblehead, Peabody, and Danvers—shoemaking forms the dominant interest. In 1911 there were 165 factories making the complete product, with an average of 19,000 operatives; in addition, cut stock and shoe findings factories employed over 3,000, and tanning and finishing leather about 5,000 more.

Peabody, a growing town of nearly 16,000 people, has but one shoe factory, but it has three for cut stock; while in the tanning and finishing of leather it employs more than 4,000 persons. The very small per cent of women workers in Peabody has not been considered in this study. Danvers, with a population of about 10,000, has six factories, with not more than 500 operatives altogether, while Marblehead, with its dozen or more factories of small output, employs an average number of 750. These towns also were not included in the special study of the Lynn group.

Of the three main-line towns, Salem, with its 13 factories, employs about 2,600 workers—twice as many as Beverly, with its 16 factories and 1,300 workers. But Beverly, though diligent in making shoes, has a large rival industry in the United Shoe Machinery Works, which draws largely for its operatives on the population of 18,600 at its doors. A few women and girls work for the "United" at machine work. The 1,260 shoe operatives are for the most part in five or six factories of fair size, one of which was selected for special study.

Of the North Shore towns Lynn is far the largest. Its population in 1910 was nearly 90,000; within 30 years it had more than doubled, and within 10 years (1900–1910) there was an addition of nearly 21,000, an increase of 30 per cent. Lynn is a prosperous city, making no pretense at beauty, except where it touches the sea and the long boot-shaped promontory of Nahant. Churches are numerous, but with the exception of the group of public buildings and some

business blocks there are few structures of stone or brick. Hasty and cheap building has been the rule since the great fire of 1889.

In 1911 the 379 manufacturing concerns of Lynn employed a maximum number of nearly 32,500 operatives. The chief industries are the making of boots and shoes and of electrical supplies and apparatus, the former being much the older and as yet the more important. Boot and shoe making and the allied industries, the production of boot and shoe cut stock and findings, tanning and finishing leather, making lasts, models and patterns, blacking, etc., claimed 246, or 65 per cent, of the total number of industrial concerns, and more than 20,000, or 62 per cent, of all factory operatives. Lynn is therefore rightly entitled to be termed a shoe city. The boot and shoe factories are for the most part in two large groups in the very heart of the city on the east and west sides of the Boston & Maine Railroad tracks, with a straggling line of smaller factories between. This grouping has been long maintained, but the recent tendency is to place factories on the outskirts of the city in sections where hitherto they have been unknown. Large new factories are, however, rare in the city. The majority of shoe concerns are housed in old buildings of red brick, crowded close together, some occupying a whole block, some a single floor or part of a floor. Outside of this concentrated area the older factories are usually two-story wooden buildings with a ground plan that looks somewhat like an eccentric H. The few new buildings are of the usual modern five or six story type, the walls high studded and nearly all window space.

The buildings of the General Electric Co. form a large group on the southwestern border of the city, where new streets are being opened up and hundreds of double or single frame dwelling houses erected for the employees. In 1912 about 10,000 employees were connected with this industry, of whom 1,800 were women and girls.

Opportunities for indoor recreation under responsible active direction are scanty in Lynn. Few churches are socialized to the extent of providing relaxation for young people who do not want to sit still all the evening after confining work all day. A visit to the dance hall for the workers whose energy outlasts 9 or 10 hours of work or to the moving-picture show for those to whom passive recreation offers a stronger appeal are the most common amusements of a legitimate character.

Dancing is as popular in Lynn as elsewhere. Every night several public dance halls are open and appear to be well patronized. Their Saturday night dances, at which men under the influence of drink are often present, have a bad reputation, and self-respecting girls rarely attend them. Few shoe workers do much reading—indeed, many claim that the work of the day is too great a strain upon the eyes to permit reading in the evening, especially by the wretched

light furnished in lodging houses. The librarian of the public library in Lynn knows a few women workers employed in stitching rooms who have long been great readers. One has spent much time on science and social questions; another is an authority on history and genealogy; but these are exceptional cases.

The strength of the women's club movement is exemplified in Lynn by a large number of organizations. Their nominal aims range from the historical club, with a membership made up from old families with "ancestors," to the inevitable dramatic club, made up of well-to-do young people, but few of these clubs influence in any degree the life of wage-earning women, and fewer still include them in their membership. Church clubs and societies gather in a few of the younger factory women, but mainly from families connected with the churches. The workers themselves have formed a few bowling clubs, which use bowling alleys under private ownership.

As in all towns near a large port of entry, Lynn's rapid increase in numbers means a new diversity in nationality. For 40 years the main nonnative element has been the Irish. The flood of French Canadian migration of over 20 years ago made its largest deposits in the northern textile towns; nevertheless, in 1905, immigrants from Canada and the British Provinces of America formed 12 per cent of the total population of Lynn. Canadians now come in fewer numbers, but Massachusetts still receives thousands each year from Nova Scotia, New Brunswick, and Prince Edward Island. These, as well as the diminishing number of foreign-born Irish and the few hundreds from Great Britain, are for the most part of English tongue and Anglo-Saxon habits.

The non-English-speaking peoples forming the true alien element, though on the increase, are as yet little more than 10 per cent of the whole population of Lynn and about 22 per cent of its foreign immigration. The ratios of the factors making up this alien element alter perceptibly from year to year. At present the proportion of Scandinavians and Canadians is diminishing; the Greeks, Italians, and Armenians, together with the Russian and Polish Jews, are on the increase, and even the Slavs and Lithuanians are no longer so few as to be counted with the "various." This change in the make-up of the alien element is too well known to need comment. It is brought forward in connection with Lynn only because of its effect on the personnel of the shoe workers.

In default of recent official information on the subject, several of the public schools in different localities were visited and the nativity of the children in the first three grades and of their parents was noted. In every case about 25 to 33 per cent of the parents and less than 10 per cent of the children were foreign born. In St. Mary's Roman Catholic parish school 45 per cent of the parents are foreign

born; the majority of these are Irish, the rest Italians, with a sprinkling of French Canadians. The Greeks show the most rapid increase. They have now a Greek Catholic church and a school of more than 90 children. Before the Balkan War there were 200 Greek families and 2,000 Greeks altogether, 300 of whom were born in Turkey. Of these, 1,000 were unmarried men and 300 unmarried girls. Of the latter, 200 were in shoe factories in Lynn and Chelsea. In spite of all these alien elements, Lynn is as yet, in contrast to many Massachusetts towns, distinctly an American city in its population and general character.

WOMEN SHOE WORKERS IN LYNN.

The frequency with which the eye meets the sign "Rooms to let" convinces a visitor that the population of Lynn must be in a state of constant coming and going. Those who come are more than those who go. Nevertheless, there is constant shifting or the "Rooms to let" sign would not be displayed so persistently. Are women wage earners among these shifters? What is their race and condition, and what are their standards of living?

To answer these questions adequately for Lynn or elsewhere would require long and close study of the workers. The employers know something, the shopkeepers something else; the churches know a little, the schools a little more. The census man has gathered a few facts and has missed a great many. Even the wage earners, who know much about the wage, hours, and nature of their work, have scanty knowledge of each other.

The shoe industry of Lynn, including cut stock and shoe findings shops, employed in 1911 an average number of about 15,500 operatives. Of these 6,000, or nearly 40 per cent, were women. Women workers form a higher proportion in the North Shore group, as a whole, than elsewhere. The main reason for this is doubtless the fact that the product is mainly women's and children's shoes. There is more stitching to be done on women's than on men's shoes and the number of supplementary processes is greater. In other towns making a similar product the proportion of women is nearly the same, as it is in certain large isolated factories, like that of the Queen Quality shoe, in Jamaica Plain. This average number, 6,000, by no means represents the entire force of women in the factories. The force continually changes and shifts, so that the average number is not more than 85 per cent of the total number employed during a year. It is probable that not less than 7,500 women were connected with the shoe factories in 1911. With the hope of gaining definite knowledge as to the nativity and place of training of these women, a simple questionnaire, with the cooperation of the management, was put through the women's rooms in three large factories. Each

worker stated her birthplace, the number of years she had lived in Lynn, and her marital condition.

The factories in which these questionnaires were circulated are of different types. Factory A is one of the largest, and is held to be the best in Lynn as to wage and management. Factory B is also large, but its product, management, and therefore personnel of the working force, are of low grade. Factory C stands midway in conditions. Taken together they form a group fairly representative of general conditions. The statements obtained as to nativity of the women are presented in Table 5. The native born are grouped according to birthplace in Lynn, other parts of New England and other parts of the United States; while the foreign born are in two groups, the one of nativity in lands using the English tongue, the other in lands of foreign speech.

TABLE 5.—NATIVITY OF 607 WOMEN WAGE EARNERS IN THREE FACTORIES IN LYNN.

[Based on personal statements of the women.]

Place of birth.	Number and per cent of workers in specified factories.							
	Factory A.		Factory B.		Factory C.		Total.	
	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.
Native born:								
Lynn	44	22.0	92	38.6	64	37.9	200	32.9
Other parts of New England	39	19.5	58	24.4	57	33.7	154	25.4
Other parts of the United States	46	23.0	18	7.6	14	8.3	78	12.9
Total	129	64.5	168	70.6	135	79.9	432	71.2
Foreign born:								
Non-English-speaking lands	48	24.0	34	14.3	27	16.0	109	17.9
English-speaking lands	23	11.5	36	15.1	7	4.1	66	10.9
Total	71	35.5	70	29.4	34	20.1	175	28.8
Grand total	200	100.0	238	100.0	169	100.0	607	100.0

A word should be added in connection with those born in other parts of New England. The stream of migration on the part of young men and women from northern New England farms and villages to the shoe-factory towns has been supposed to be constant and considerable. As to the men no statistics are available, but among the women those born in Maine, New Hampshire, and Vermont are but a handful. Other parts of Massachusetts claim most of those not native to Lynn, with the greater number from towns within a radius of a few miles from the latter.

Analysis of the foreign-born element also disproves some common opinions. English is the native language of by far the greater number. The Canadians are largely from Montreal or Quebec, where English as well as French is spoken. Among the French Canadians

traits and training differ from those marking natives of Great Britain and Ireland, or even people of the British Provinces of America, nevertheless English speech and Anglo-Saxon customs have shaped thought and habit even for the French Canadians. Many of them have been long resident in the United States. Among the truly alien women a number of "Russians" (Jews) are present in the sole-leather and packing rooms of one factory, where also a few Greeks and "Austrians," probably Slavs, are found. In the stitching rooms are a few Italians, while Germans, Scandinavians, and central Europeans are conspicuously few. The foreign-born women doing skilled work are largely natives of Scotland, Ireland, or the British Provinces; Jewish women are seldom among the skilled workers.

Another point brought out by the questionnaire related to the length of residence in Lynn. The workers in these three representative factories, when not Lynn born, were for the most part Lynn bred. This applies both to native and foreign born; for the greatest number upbringing and education have been in Lynn. The proportion whose residence in Lynn has been five years or less is remarkably small; a residence of five years or over for more than 75 per cent and of 10 years or over for nearly 60 per cent is shown for those listed in Table 6.

TABLE 6.—LENGTH OF RESIDENCE IN LYNN OF 407 WOMEN NOT BORN IN LYNN WHO WERE WORKING IN THREE OF ITS LARGE SHOE FACTORIES.

[Based on personal statements of the women.]

Number of years in Lynn.	Number of women.	Per cent of total.
Less than 1 year	10	2.4
1 year and less than 6 years	88	21.6
6 years and less than 10 years	71	17.5
10 years and less than 20 years	114	28.0
20 years and less than 30 years	81	19.9
30 years and more	43	10.6
Total	407	100.0
SUMMARY.		
Less than 10 years	169	41.5
10 years and more	238	58.5
Total	407	100.0

MARRIED WOMEN IN LYNN SHOE FACTORIES.

When any large group of women over 25 years of age, not vowed to celibacy, is under consideration, it is a natural assumption that the majority are married. The customary age of marriage is frequently later in an industrial community than elsewhere, yet women over 25 are as a class not affected by this. There is a tendency to account for the many single women aged 25 to 40 in the factories by the old tradition of the excess of women over men in Massachusetts.

This excess, beginning with the days of the California gold discovery and greatly increased by the losses of the Civil War, at one time undoubtedly influenced considerably the industrial distribution of women. The disturbed balance has, however, been largely restored by foreign immigration which, though in smaller proportion than some years ago, still brings yearly more men than women to Massachusetts. Recent statistics of the population prove that so far as the present proportion of the sexes is concerned there is no reason why marriage should not be as frequent in Lynn as in any normal community, and the proportion of married women is, in fact, greater than in many New England towns.[1] The fact that a large proportion of the shoe workers are unmarried women does not, therefore, mean that there is an undue proportion of single women in the city; rather it indicates that the majority of the women shoemakers withdraw from the industry when they marry.

Concerning the married women in Lynn shoe factories, there are two commonly accepted beliefs: First, that the proportion of such workers as compared with other shoe centers is abnormally large; and, second, that American women are much more inclined than foreign women to remain in the factories after marriage or to come back to them after an interval of domesticity. As to the first of these beliefs, the facts gathered in this investigation tended to confirm it.

In 1905 married women, including in that term widows and divorced and deserted wives, formed 26.4 per cent of the total female shoe workers of Massachusetts.[2] Among the 720 female workers in Lynn as to whom this fact was learned, 33.1 per cent were married. Among the workers themselves the belief in the unusual proportion of married women in the Lynn factories is general, and women who have worked in more distant shoe centers, as in Brooklyn, Rochester, and the towns of the West, where the employment of married women is said to be unusual, are at a loss to explain the contrary custom in Lynn.

For the second belief no confirmatory evidence was found. The proportion of married women among the female shoe workers of the whole State in 1905 was as follows:[3]

Per cent of native born who are married	25.7
Per cent of foreign born who are married	29.3
Per cent of both classes who are married	26.4

[1] Total population of Lynn, 89,336; number of males, 44,585, of females, 44,751. Thirteenth Census, Vol. II, p. 882. Proportion which unmarried form of female population, 15 years or over: Lynn, 33.5 per cent; Brockton, 32.5 per cent; Fall River, 38.2 per cent; Brookline, 53.9 per cent; Cambridge, 39.8 per cent. Idem, Vol. I, pp. 663–665.

[2] See Massachusetts Census of 1905, Vol. II, pp. 54, 55. Of the female cotton-mill operatives in Massachusetts at the same date 29.3 per cent were married, widowed, or divorced (Vol. II, p. 69).

[3] Calculated from figures given in Massachusetts Census of 1905, Vol. II, pp. 54, 55, and 187.

The figures gathered in this investigation showed the following proportions:

TABLE 7.—MARITAL CONDITION OF 720 WOMEN WORKING IN THREE LARGE SHOE FACTORIES IN LYNN.

[Based on personal statements of the women.]

Marital condition.	Native born.		Foreign born.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Married	136	27.0	102	47.2	238	33.1
Single	368	73.0	114	52.8	482	66.9
Total	504	100.0	216	100.0	720	100.0

In these three factories, it will be observed, the foreign born not only show a larger proportion than the native born of married workers, but this relative excess is greater than it was for the State as a whole in 1905.

Among the English-speaking women visited, Americans lead in the proportion of married workers. They are followed closely by the natives of Great Britain and Ireland and of the British Provinces of America.

The married woman with a husband in the factory supplements his earnings as frequently from choice as from necessity. The rent for a flat or a half house near the factory is high; the whole house at a distance is inconvenient. Therefore it is the habit of most young couples coming to Lynn to hire one room in a lodging or boarding house. This leaves the young wife without sufficient occupation. Her husband is away all day; she is perhaps without friends. It does not take her long to discover that the factory will provide friends, occupation, and the extra money for those small comforts and luxuries she desires, but which her husband's scanty earnings deny. Again, those women who have been factory workers themselves dread housekeeping, with its hours of loneliness and its cares, to which lack of domestic training may make them as unfitted as averse.

Two cases taken from the Lynn schedules typify a class of workers by no means confined to that city. Mrs. G. is a Maine woman, 40 years old. She left school at 17 and was then in the second year of the high school; at 18 she began work in a shoe factory for her own support. At her marriage four years later she left the factory and did not return until her only child outgrew babyhood. She has now been working several years. Her husband is in the lasting room of the same factory. They are boarding; do not attend church; they stay at home evenings to rest and read. Both are members in good

standing of a union. She claims that her wages are required to help support the family of three.

Mrs. K. is a native of New Brunswick, but has been 14 years in Lynn. Her husband, to whom she has been married 7 years, is a teamster; they have no children. She left school at 15 years of age, after completing eight grades, and began shoe work at 18. She is a vamper, working about 9 months in the year. In summer she and her husband become photographers among the lakes of Maine. They pay $4 a week for a room and take their meals out. They do not attend church, and their recreations are the theater, occasional reading, and the annual dance of the Union Benefit Association.

Not only in their distinctly American training, but in their mature age the women shoe workers of Lynn differ from almost any other feminine factory force. There are obvious reasons why the ranks in the factories should be filled with girls and young unmarried women rather than with those upon whom depend the conduct of the home and the bearing and rearing of children. Much of the work in the shoe factory needs, however, mature judgment, and offers what seems an unusual reward, and thus attracts a class of women who stand almost alone among factory workers as regards age. Exact figures on this point are, however, difficult to obtain. Only in rare instances does a factory record the age of a worker, except in the case of minors; no such record was found among the factories visited in Lynn. Few women, unless highly skilled, would be taken on as new workers if they appeared over 40, yet there are many women much beyond that age who have been more or less constantly in the same factory for 10, 15, or even 20 years. The interviews with more than 100 women in their homes or lodging places, together with observation in the factories and the statements obtained from several hundred women as to the length of time spent in the United States or in Lynn, tend to show that women from 30 to 50 years of age form a large proportion of the working force.

LIVING CONDITIONS OF WOMEN SHOE WORKERS IN LYNN.

Without a more extensive house to house investigation than has been possible in this inquiry, it is hazardous to venture definite statements in regard to the proportion of women attached to households or otherwise. Among 87 women interviewed at home 62 per cent lived in homes of their own or of their parents, 11 per cent boarded with relatives, while 27 per cent were not attached to families, but lived in lodging or boarding houses. These figures are far too scanty for generalization, but data gathered from various other sources would indicate the number of women shoe workers living in lodging or boarding houses in Lynn as not far from 1,000. A number of these are married, husband and wife occupying one room;

some are widows; a few have children, but the majority are unmarried girls and women without home ties.

In nearly every quarter of Lynn the lodging house is prominent, but near the railroad station and the larger factories the "Rooms to let" sign is seen in most of the houses. The prices for rooms are uniformly high, though the conditions vary greatly. A large four-story lodging house near the civic center contains 143 rooms let by the day, week, or month. The majority of these rooms are of fair size, some have good light and air, but the furniture is shabby, and both rooms and furnishings sorely need cleaning. Each floor has two or three bathrooms and separate toilets, fairly clean, but used with no discrimination as to sex. The rooms are let, as in a hotel, to any applicant, of either sex, with no references required. No reception room of any kind is provided. Guests, if received at all, must be taken to the lodgers' bedrooms, where also any social intercourse among the lodgers must take place, as there is no dining room. Prices here varied from $2.35 per week for a small dark back room, to $3.50 for rooms on the front. Lodging houses near the station, and therefore convenient to several large factories, showed similar conditions, though the neighborhood and rooms were inferior. Convenience of location, however, keeps up the prices, which ranged from $2.50 to $3.50 for small rooms shabbily furnished and with wretched artificial light. In one house, somewhat unfavorably placed near the railroad, conditions were excellent. The sensible woman who was mistress here declared that as a moral safeguard no lodging house should be without a reception room, and she does not permit her lodgers to take guests of an opposite sex to the bedrooms. In several houses near two or three of the largest factories grime, dreariness, and discomfort were everywhere evident, and some were filthy in the extreme. No reception room was provided in any case; women lodgers receive men visitors in their bedrooms. The rents for these houses were abnormally high. The mistresses claimed that they could not afford to reserve a reception room.

Restaurants or "mealing houses" are also numerous. The usual price per week for meals is $3 to $3.50. The former price is often charged for women, the latter for men. Thus for a fairly decent room and tolerable food not less than $5 to $7 a week must be paid. As the price for food can not be cut down, women making $8 a week or less will try to cut down on the room. This is frequently done by sharing a room with another worker.

The foreigners of both sexes are usually members of families or of family households. Greek and Italian unmarried girls are carefully guarded. The Greek priest claims that a lodging house for both sexes would not be tolerated. The 150 unmarried Greek girls working in Lynn shoe factories live with their own families or with relatives.

The customs of the home country are maintained. Here, as there, a Greek girl separated from her family loses her chance to marry.

The social status of the women in shoe factories in Lynn is variously estimated. A recent investigator states on one page of a report that women inevitably lose caste by working in a shoe factory; on the next that America may well take pride in this class of wage earners. If these opposing statements were less inclusive, both would be true. The American and Irish women who filled the stitching rooms in the years when women were found in no other part of the factory were above the ordinary factory force in intelligence, education, and standards of living. Few were unattached to families and fewer still continued to work after marriage, while they mingled on equal terms with the shopkeeping or clerking classes of their city. A constantly decreasing number of this type now remains. The usual view of the social standing of this class of women is shown by the attitude of a prominent official of the Boot and Shoe Workers' Union, who, a father himself, after some hesitation declared he would be willing to put his daughter in a stitching room in Brockton, but would on no account do so in Lynn.

It is said by social workers in Lynn that an unattached woman coming to the city to work in a shoe factory has absolutely no hope of making social connections outside of the factory and lodging house unless she joins a church. A few do this; more who have been churchgoers in their own home towns shrink from intruding upon a strange congregation. The Young Women's Christian Association has no branch in the city. Its place has been partly filled by a Women's Reading and Rest Room established some years ago by certain philanthropic ladies of Lynn. The quarters of this association have recently been transferred to an ample and artistically furnished house on Broad Street near the heart of the city. In this home are rooms for 20 girls, rented at very moderate rates. A kitchen and dining room are also provided, where girls from outside may cook their own lunch at noon, and may rest, read, or talk in the pleasant hall and library. There is a large gymnasium, open afternoon and evening for classes. These unusual advantages are enjoyed by young women a good deal above the shoe workers in social standing, mainly stenographers or members of the office force in shops or factories. A machine operator or two of a superior grade has come in, but the majority of factory girls would feel out of place in these associations. The gymnasium could well enlarge its uses to meet the needs of the lodging-house girls everywhere in the neighborhood, but to do this different forms of recreation would have to be introduced, and for this movement the managing ladies are not yet ready.

A similar home designed especially for factory girls has been established by the manager of the Sorosis factory. In this "annex"

are rooms for 10 women, a library, evening classes in sewing and embroidery, and a large dining room where good meals are served at small cost. These privileges are offered to club members only. There is no gymnasium or other place of active recreation.

BROCKTON AND THE PLYMOUTH COUNTY SHOE TOWNS.

Brockton lies on a branch of the New York & New Haven Railroad, about 20 miles south of Boston and at an equal distance west of the coast of Massachusetts Bay. It is one of a group of towns in the northwest corner of Plymouth County, in all of which the making of shoes is the chief business. Bridgewater, Randolph, Rockland, Whitman, and North Abington all lie within a 10-mile distance and are connected with Brockton and each other either directly by rail or by a ramification of trolley lines.

Important factories are located in some of the smaller towns, but in amount and value of product Brockton not only leads in the region but is a close rival to Lynn, so close that in one or two recent years the inland city, though now holding second place, has actually run ahead of the North Shore center in its manufactures. In 1911 the number of Brockton factories was, however, only 32, against Lynn's 117.[1] Brockton is not the home of small plants; larger buildings, better equipment, and firmly established business are general characteristics of the shoe industry in Plymouth County.

Of the 60 or more factories in Plymouth County making the complete shoe product 32 are in Brockton. In addition 43 factories produce shoe and leather findings and cut stock. Foreign labor is largely employed in these shops; women form 36 per cent of the total number of employees as against the 27 per cent in the factories making a complete product. Brockton also occupies chief place in Massachusetts in the production of shoe-factory tools and supplies. This industry grows apace, both in Lynn and Brockton. Work with leather or for leather products absorbs the whole local industrial energy.

Brockton as a city is as frankly industrial as Lynn, but its aspect shows civic interest on the part of its people and a degree of general, if moderate, prosperity. Streets are uncongested, public buildings well placed, and homes well kept. Fine schools, numerous churches, and a library housing 15,000 volumes, give to the city a true New England character. There is little absenteeism on the part of the factory owners, whose families have in some cases been in the shoe business for a century. The 30 or more shoe factories are grouped about the three railroad stations in Brockton proper and in its north and south sections, Montello and Campello, originally villages but now a part of the city. Streets in the vicinity of the factories are

[1] Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, p. 24.

closely built, but fairly clean. The city on the whole is attractive as a place of residence.

WOMEN SHOE WORKERS IN BROCKTON.

Brockton, according to the Federal census of 1910, is among the cities of Massachusetts showing large increase in population. In 1910 its people numbered 56,878, an increase of nearly 30 per cent in 10 years. The original American element was, in accordance with the condition in eastern Massachusetts cities 25 years ago, modified mainly by the Irish. But if at present a factory superintendent in Brockton is questioned as to the nationality of his working force, he is apt to reply, "We have everything but a Chinaman." The statement is scarcely an exaggeration. About 30 years ago French Canadians began to arrive, shortly followed by Swedes. More recent additions are the southern European and semioriental people, with some from central Europe, and the inevitable Russian and Polish Jews. English and Scotch from Canada and the British Provinces are less numerous than in Lynn. A few Portuguese are found, with faces almost as dark as those of the Negroes from families who settled in Plymouth County before the Civil War. Colored women work in many shoe factories, but are not distinguished in the subjoined table of nativity. This includes employees of two large factories in Brockton. The Swedes, at first largely employed in shoe findings shops, have made their way up to the regular factories, where in all the skilled processes they are valued workers. Though their speech is alien to the American, their habits and standards are not so. In rapid assimilation of American habits they correspond to the immigrants from the British Provinces in Lynn, and like them are distinct from the later invasion.

TABLE 8.—NATIVITY OF 344 WOMEN WAGE EARNERS IN TWO FACTORIES IN BROCKTON.

[Based on personal statements of the women.]

Place of birth.	Number and per cent of workers in specified factories.					
	Factory A.		Factory B.		Total.	
	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.
Native born:						
Brockton	25	22.9	44	18.7	69	20.0
Other parts of New England	58	53.2	107	45.5	165	48.0
Other parts of the United States	4	3.7	4	1.7	8	2.3
Total	87	79.8	155	65.9	242	70.3
Foreign born:						
English-speaking lands	15	13.8	32	13.7	47	13.7
Non-English-speaking lands	7	6.4	48	20.4	55	16.0
Total	22	20.2	80	34.1	102	29.7
Grand total	109	100.0	235	100.0	344	100.0

The shoe factory draws the immigrant to Brockton, and if he is not inefficient, it keeps him; industrial reasons seldom drive the steady worker from this center. Length of residence for some hundreds of women shoe workers not born in Brockton is given in Table 9. Were a questionnaire put through the men's rooms it would give, doubtless, somewhat different results on this point.

TABLE 9.—LENGTH OF RESIDENCE IN BROCKTON OF 714 WOMEN NOT BORN IN BROCKTON WHO WERE WORKING IN THREE OF ITS LARGE SHOE FACTORIES.

[Based on personal statements of the women.]

Number of years in Brockton.	Native born, but not born in Brockton.		Foreign born.	
	Number.	Per cent.	Number.	Per cent.
Less than 1 year	6	1.2	12	5.2
1 year and less than 6 years	102	21.1	71	30.7
6 years and less than 10 years	83	17.2	38	16.5
10 years and less than 20 years	183	37.9	66	28.6
20 years and less than 30 years	76	15.8	35	15.2
30 years and more	33	6.8	9	3.8
Total	483	100.0	231	100.0

MARRIED WOMEN IN BROCKTON SHOE FACTORIES.

Special inquiry made among 850 women shoe workers showed that nearly 40 per cent were married. Frequently husband and wife are both wage earners, although the work of married women is strongly disapproved by the better class. A reason for it is the desire to secure an income upon which both may live and save money. Wages, though high, are not continuous. That there is much saving is proved by the line of depositors stretching down the street from the People's National Bank every Saturday night. Employees in shoe factories own 90 per cent of the houses in Brockton. Children to make these households complete are frequently wanting. Brockton's birth rate is the lowest in the State, while the divorce rate is the highest. The want of the common bond of children is unquestionably one reason for the latter fact, but another cause is probably that a wife's support so often stands ready for her in the factory when the husband's character or conduct does not measure up to her standards. Of the children brought into the courts 80 per cent are from homes where both parents are daily out at work, while in the Brockton day nursery 50 per cent of the babies have mothers in the shoe factories.

TABLE 10.—MARITAL CONDITION OF 853 WOMEN WORKING IN THREE LARGE SHOE FACTORIES IN BROCKTON.

[Based on personal statements of the women.]

Marital condition.	Native born.		Foreign born.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Married	258	37.3	73	45.1	331	38.8
Single	433	62.7	89	54.9	522	61.2
Total	691	100.0	162	100.0	853	100.0

LIVING CONDITIONS OF SHOE WORKERS IN BROCKTON.

The homes of Brockton shoe workers are many and, on the whole, show good standards of comfort. Workers without homes often rent rooms from resident families, but for the majority of the unattached the lodging house stands ready. The better type of lodging house is usually termed a hotel. One of these, where rooms rented for from $3.50 to $5 per week, showed excellent conditions, among which were the provision of a reception room and reading room. A few shoe operators of both sexes roomed here, but not many can afford the terms. In other houses, where prices were lower and no reception rooms were provided, lodgers of both sexes received visitors in their rooms.

The women shoe workers, especially the childless, have the reputation of extravagance in dress. The high cost of necessaries, the indulgence in luxuries, and the ignorance of economical expenditure combine to keep many of the wage earners living from hand to mouth. The Americans and Irish in particular wear much finery, for which they are often in debt to the credit clothing stores. Prices charged at these stores are very high, but by paying $1 down a whole suit may be obtained, which is often worn out before it is paid for. Superintendents of certain factories are greatly annoyed by the frequency with which assignments of wages are served on their employees. It is the custom with one large firm to pay wages before pay day, charging a discount of 5 per cent; sometimes a profit of $75 a week is made by this practice.

Brockton's winter recreations are largely limited to the moving-picture show, with its vaudeville features, and to the dance hall. The "movies" are carefully censored by public opinion; it is claimed the pictures are of a good class. There is also one theater, with a stock company. In singular contrast to the propriety of these diversions is the character of the young people's favorite meeting place, the dance hall, where lack of supervision has greatly lowered the moral tone. Homeless young girl workers are not so numerous in Brockton as in Lynn, but they are as little safeguarded from improper associations and amusement. The Young Women's Christian Association does not attract this special class, nor do the churches make special

provisions for them. Opportunities for physical and mental development are not offered to adults by the public-school system, nor is there a public recreation organization. Brockton offers many advantages to the sheltered, home-loving woman, but few to her sister forced to an isolated life.

BOSTON AS A SHOE CENTER.

In Boston proper, shoemaking is no longer a prominent industry. The few shops seem either content with a small output or desirous to move into outlying sections. In South Boston the number of shoe factories is increasing by removals from Lynn and Brockton, but even there other industries claim precedence in importance. Jamaica Plain with its 5,000 operatives in one factory is really a shoemaking section. Chelsea's several factories show a large output of low-grade shoes for women and children. The distribution of population in these special localities is somewhat different from that of the metropolis. Americans and Irish in South Boston, East Boston, and Jamaica Plain, and Jews, Greeks, and Italians in Chelsea, are the chief nationalities. In Boston proper the proportion of women workers is small. In Chelsea, where an average of 6,436 shoe operatives was reported in 1911, only about 28 per cent are women workers, the stitching-room forces being largely made up of men. South Boston factories draw for their partly skilled processes from a mixed and unstable community, but their best-paid workers are still mainly American and Irish. A description of the character and habits of these workers would mean a description of the wage earners of all Boston, and would not, as in the case of the other centers, provide information leading to conclusions of value as to the shoe workers as a class.

In Jamaica Plain, partly owing to the policy of the large factory in employing workers living within easy reach of their work, a class of stable resident employees has been developed. The nativity of the women in one stitching room in this factory is shown in Table 11.

TABLE 11.—NATIVITY OF 159 WOMEN WAGE EARNERS IN A STITCHING ROOM OF A BOSTON SHOE FACTORY.

[Based on personal statements of the women.]

Place of birth.	Number.	Per cent of total.
Native born:		
Boston	93	58.5
Other parts of New England	19	12.0
Other parts of the United States	2	1.3
Total	114	71.8
Foreign born:		
English-speaking lands	21	13.2
Non-English-speaking lands	24	15.0
Total	45	28.2
Grand total	159	100.0

All the city opportunities for recreation and education are open to these shoe workers of Boston; this, with other attractions of city life, makes them reluctant to move away. They are, however, often pushed out by the high cost of living, which is not balanced, as in Lynn, by high wages.

MARLBORO AND THE MIDDLESEX COUNTY SHOE TOWNS.

Marlboro is 25 miles west of Boston, and though reached by branches of two railways, is not on the main line of any railway. In the 20 years from 1890 to 1910 it added less than 1,000 persons to its population of 13,800, and now numbers less than 15,000, of whom over 4,000 are shoe workers. It is a pleasant, open, well-planned little town, with a fine public library and town hall, a new and sightly high school, and several flourishing factory industries, among which the boot and shoe factories hold, as they have since the days of farm and village shoemaking, the most conspicuous place. The chief shoe plant has four large modern factory buildings and employs not far from 2,000 operatives, of whom more than one-third are women. The three or four other factories produce heavy or low-grade shoes and boots for men. Their operatives are often drawn from the surrounding farms or villages, to which also parts of the work are still sent out.

The population of Marlboro, until 30 years ago, was almost exclusively of American stock, with a small proportion of Irish. Immigration from Canada added hundreds of French Canadians as workers in the growing factory industries. In 1905 these French Canadian immigrants numbered nearly 1,200, while the Irish were 900 strong. The British Provinces contributed 500, and Italy and Greece together about 250. The foreign element at that date was about 30 per cent of the population. The English-speaking element was then and is now far less in proportion than it is in Brockton or Lynn. At present the immigration of French Canadians has largely ceased; but these alien settlers have become a permanent though still distinct part of the community.

A more singular element in the Marlboro community is the large number of Greeks, brought in at the time of a strike in 1895. The Greeks are now permanently settled in considerable numbers; they have their families, and are perhaps a little more clannish than the French Canadians. The population, originally so distinctively American, is now, therefore, made up of unmixable elements. American and English yet predominate, but the French Canadians on the "Hill" and the Greeks in the "Hollow" are likely to remain as long as shoes and automobile supplies are made in Marlboro. A large number of the women of both races work in the shoe factories.

Exact statistics are not at hand as to the proportion of married women, but the French Canadian, while governing his family by strictly patriarchal methods, is accustomed to permit his wife and daughters to share in its maintenance. Married women from Greek families do no factory work as a rule.

The town is a place of homes. It has a small number of unattached men, but the problem of the unattached woman scarcely exists. The factories close down on Saturday afternoons; the factory girls go home, put on their finery, and walk the streets in couples or take a trolley to enjoy the gayer but still restricted diversions of South Framingham or Natick. The relation of the more important factory employers to their workers is helpful and friendly, and as a whole Marlboro comes near to meeting the possible ideal of a shoe center.

The average earnings of shoe workers in Marlboro are much below those of Lynn, Brockton, or even Haverhill, but this fact is balanced by the lesser expense of living. Rents, food, even clothing, cost less than in the more easterly towns. Doubtless the French trait of thriftiness has its influence on expenditure as a whole. There is almost no display of wealth and as little sign of real poverty. Agur's prayer for a subsistence, neither poverty nor riches, seems answered for this quiet town.

In view of what would appear its attractive conditions, it is singular that shoe workers from livelier centers usually reject with energy the idea of removing to Middlesex County. The reasons seem to be that, except in its larger number of operatives, Marlboro labor conditions are typical of other Middlesex County towns in which shoe factories are placed. The farm as well as the village population has long been accustomed to finding work in the factory when farming flags or fails. In all these towns the supply of help is more abundant than the demand; the effect is lower wages and less shifting among the workers, who hold their places with tenacious jealousy against newcomers.

CHAPTER III.—NATURE AND CONDITIONS OF WOMEN'S WORK IN SHOE FACTORIES.

TECHNICAL PROCESSES.

It has been calculated that about 40 separate pieces, 50 operators, and from 100 to 150 different processes are required in the construction of a modern shoe as it passes from the hide in the cutting room to its tissue-wrapped completion in the packing room. Notwithstanding this minute division of labor, the three main processes now involved in the actual manufacture of a shoe are the same that have been in use since leather was first fitted as a complete covering to the foot. These are the cutting out of soles and tops, the sewing together of the pieces of the uppers, and the fastening together of the two main portions.

With the progress of civilization new standards govern the requirements for clothing of every sort. Comfort, convenience, and durability are prime necessities. Beauty of form and finish are valuable qualities, as they have always been, but if they spell inutility and discomfort they now attract only a minority of buyers. It is in part the endeavor to achieve comfort and durability that has multiplied the pieces in a modern shoe, and it is the effort to reduce cost and gain time in production that makes the number of processes twice or thrice that of the pieces. This modern differentiation with its multiplication of minor operations maintains the demand for women and girls as workers in the shoe industry. The increase in numbers, both absolute and relative, of these workers has been shown in Chapter I. We have now to consider their present part in the making of shoes.

The most convincing proof of the complexity of the present-day shoe manufacture is given by a visit to one of the factories of the modern type, where each room or floor is distinguished by the chief processes there carried on. These processes fall into the following main divisions: (1) sole-leather cutting, (2) uppers cutting, (3) stitching, (4) lasting or making, (5) finishing. Sorting and packing, though demanding both space and workers, are not properly processes. The cutting of the sole-leather parts, though usually included in the work of high-grade factories, is often the business of special shops from which the soles and heels are bought in assorted lots as required by the shoe factories. Certain minor parts of the uppers are also at times cut in special factories.

The first step in the production of a shoe properly begins in the main office, where the orders from agents or traveling salesmen are

received. In this office tags are made out stating the kind and quality of shoe to be made and the character of each of its parts; this collection of tags constitutes an "order" and is sent to the top of the building, where a clerk makes out long two-part tickets, one for the sole-leather room, the other for the cutting room. Both parts contain detailed specifications of the operations to be done. A "top-ticket" indicating the nature and the amount of the order is delivered to the sorter at the leather bins, who carefully selects the leather needed, attaches to it the "top-ticket" and sends it to the cutting room.

CUTTING.

The cutting room, or upper leather department, is always on the top floor of a factory, and in Massachusetts the cutters proper are invariably men. They are usually of three classes—the lining cutters; the outside cutters, who cut quarters, vamps, tips, tops, etc.; and the trimming cutters, who cut stays, tongues, and other small parts of the shoe. Frequently a dozen different pieces of leather must be cut for the shoe exclusive of the sole and heel. Two methods of cutting are in use, the hand process and the machine process; each has its warm advocates among factory managers. In each center of manufacture one or the other type will be found prevailing—in Boston, machine cutting; in Lynn, hand cutting; while Brockton, though using both, shows a growing preference for hand cutting. The quality of the shoes is not always indicated by choice of process; Brockton, for instance, produces high and medium grades of men's shoes, while Lynn produces all grades of women's and children's shoes in large quantities. In the coarser grades of men's shoes, however, machine cutting is exclusively used. Among the reasons governing choice of method local habit appears prominently, as in Lynn, where the number of small factories does not favor the introduction of costly machinery. But elsewhere, not only the cost of machines but the waste of leather held to accompany their use to many managers more than offsets the undoubted saving in time.

In machine cutting the hide is spread upon the cutting board of the machine, and upon it the cutter places a die, namely, a steel form with a sharp edge; the end of a heavy iron beam arranged to swing horizontally from left to right is caused to fall heavily upon the die by the pressure of the cutter's foot upon a lever or by the pulling of a handle. Several thicknesses of leather may be cut at one time. The dies are, however, expensive and liable to injury; moreover, since in high-grade shoes the shape of the vamp, quarter, etc., is constantly changing, the cost of new forms is a heavy one. Where fashions, as in low-grade shoes, are more stable the machine cutter is more largely used.

In the hand-cutting process "patterns" take the place of the dies. They are made of heavy cardboard, edged with steel, and look not unlike an asbestos table mat. The cutter, placing his various patterns upon the hide with careful regard to the quality and grain of the leather and to the most economical fitting, takes a short, sharp-edged and pointed knife, much like the peeling knife favored in our kitchens, and cuts rapidly and closely around the edge of the pattern.

The cutters are, as a class, men of mature years and judgment, familiar with the quality and nature of leather. The most serious risk of waste is that in the cutting room; leather is increasingly costly, and only by the strictest economy in its use is the margin of profit maintained. In some factories the hides given out are charged against the cutters, who are in turn credited with the number of pieces they can produce. In the best factories work is paid for on a time basis, and speeding the cutters is discouraged, as it tends to waste of leather and inequality in the parts.

Lining cutting is a less skilled process; it is sometimes done by the die and hammer, but more frequently by the use of patterns. In either case 20 or more thicknesses are cut through at once.

The cutting-room processes are not yet complete, for at one end of the long room may be seated a dozen girls at "skiving" machines. They are shaving down on the under side those parts of the uppers which will show in a finished shoe, so that they may be turned over smoothly.

Why should cutting continue to be so exclusively man's work? Long-continued custom is no doubt a weighty reason. If the retrospect of shoemaking be made to cover centuries instead of decades, women will appear to be intruders in what has been immemorially a man's craft. Yet custom is not all. The material handled in the cutting room is heavy and clumsy, while the manipulation of hammer or machine requires considerable muscular force, which the operator must exercise while standing. Women brought up in towns will shun any operation to which these conditions are attached. There are a few exceptions. In the West some factories during a strike period installed women cutters, who are said to have been retained under such modifications of conditions as made the work less taxing. It is unlikely, however, that this custom will spread. The skiving, though suitable enough for women so far as the work itself is concerned, is not always done by girls, as in some factories they are considered out of place in a special men's room.

STITCHING.

On the floor below the cutters, often the fourth or fifth from the street, is the women's particular department—the stitching room. It is a place of many intricate operations. The floor is closely occupied by tables and machines, at which the women stand or sit. The cut

pieces have come down from the floor above in three classes of bundles, each containing several dozen pieces. Before the actual stitching come several minor processes classed as "table work." Girls at different tables black the edges that will show in the finished shoes, at others rubber cement is rapidly daubed upon the edges of vamps, quarters, etc., and the cemented pieces are passed to a machine, by which the edge is turned over and firmly pressed. In many localities old-time hand processes still survive at this stage, the turning being done by hand and the pressing by the blows of a hammer. The ornamental holes along the edge of toe pieces are punched out by a perforating machine.

The materials are now ready for the actual stitching. Each process has its own group of machines at which the operators do one sort of stitching and no other. The processes will be given in the usual order of progress:

1. Toe piece or "tip" stitched to vamp.
2. Ornamental tip, if used, stitched on.
3. Vamp joined at the back.
4. Quarters (tops) seamed up.
5. Top seam pressed open and smoothed by machine.
6. Backstay stitched on.
7. Eyelet row—if the shoe is to be laced—stitched up and down, or button fly stitched on.
8. Vamp and top stitched together.

The linings, meanwhile, at other machines have gone through generally similar processes, and are ready to be joined or "closed on" to the leather parts. The lining quarters already have the inside top band pasted on and are now stitched to the corresponding piece of leather with the outside in. The pieces are carried to the turning machine, where the operator turns the pieces by hand, and consigns them to the machine which with a metal finger straightens the corners and, seizing the turned tops, claps them together between heavy metal plates and presses flat the turned edge, after which a "top stitcher" stitches one or two rows along the top. The pieces are now consigned to the eyeleting or the buttonholing machine, both intricate inventions. The duplex eyeleting machine will insert eyelets in both quarters at the same time; the Reece buttonhole machine stamps out the buttonhole, lays a cord around it, sews around the cord and through the leather, and stops automatically. The machine is a marvel in its speed and accuracy, but it is heavy and noisy, and its delicate springs are liable to get out of order, in which case it must be repaired by the operator, who, if working by the piece, learns to detest the machine.

The final and most difficult stitching operation is "vamping," or joining the tops to the vamp. The awkward bulging top must be

fitted to the vamp with the nicety used in fitting a collar to a waist, seams must meet exactly, and fulling be carefully avoided. "Flat vamping" is the general method, but in some factories the uppers are placed over a cylinder which takes up the bulge of the leather. This method is more fatiguing to the operator, since it requires sitting erect with elbows raised in a position of some strain. Vamping, by either method, is a highly skilled process and deserves its position at the head of the stitching room.

The tops, if for a buttoned shoe, then go through a machine which sews on the buttons. The worker has only to feed in the top in the proper place; the machine continually shakes a metal hopper, from which the buttons pass along a tiny rail, always shank first, the machine sews them to the shoe and "finishes" the space between.

The united parts are now properly termed uppers. They are taken to tables for tying ends of thread, buttoning, lacing, etc. They are sorted, tied in bundles, and passed to the floor below.

MAKING SOLES AND HEELS.

While the uppers have been subjected to this series of intricate operations, the soles and heels, if the factory makes men's shoes, are being prepared in the basement of the building. The heavy machinery is more safely installed on the solid ground, and the dirt and débris inseparable from sole-leather manipulation are more readily removed than from the upper floors. Under the best conditions possible the sole-leather room is an unpleasant place and under careless management it may be almost unbearable; the suffocating odor of hides and of glue, the clank and grind of heavy machinery, the lack of good air, and the scanty light render it a veritable purgatory, shunned by workers of the better sort.

Soles are cut in the rough out of dampened hides by a heavy "dieing-out machine," and are then passed to a "rounding machine," which works a little knife that darts around the sole and cuts it to fit exactly the pattern to which it is clamped. A heavy rolling machine afterwards performs the beating of the sole formerly done by the shoemaker's hammer. The sole is next fed into a splitting machine, which reduces it to an even thickness. Insoles are of the same thickness as outsoles, but of a lighter leather. If the shoe is to be a "Goodyear welt" shoe, the channeling of the insole is done in this department. These heavy machines are all managed by men standing at their work.

The construction of a heel is also no simple process since it is made up of a number of parts, often of different materials; the minute distinction of these parts indicates the important place the heel occupies in shoe evolution. The layers or "lifts" forming the heel are

cut from scraps of leather by a machine and cemented together by hand. Heavy machine pressure fixes the cement and greatly increases the wearing quality of the heel. The heels are left in a rough state, and the top lift or bottom layer is not attached until the shoe is lasted. Inner and outer soles, counters, toe boxing, and heels are sorted and marked and conveyed to the lasting room.

LASTING-ROOM PROCESSES.

In this room all parts of the shoes are brought together, uppers from above, heels, soles, and counters from below, to be sorted with reference to putting together the parts belonging to the same shoe. The sorting is done by boys who need only the ability to read the corresponding marks on the leather pieces. Girls and women are sometimes employed for this "unskilled" or "table" work, but all actual operating in the "making" of a shoe is done by men.

In attaching the upper to the sole several distinct methods are employed, differing largely in accordance with the grade of the shoe or sometimes with the sex of its future wearer. The Goodyear welt process is used in the finer grades of men's and in the medium grades of women's shoes; the McKay process chiefly in men's heavy shoes; the turned shoe process chiefly in the finest grades of women's shoes.

The first process in the lasting room is that of "assembling." The assembler places the counter between the lining and the back part of the vamp, as a stiffening; puts the "boxing" in the toe, tacks the insole to a wooden last, places the upper above it, and thrusts the whole into the clutches of a machine that pulls the back of the upper down over the heel seat and tacks it securely. A second operator with his "pulling over" machine does a similar service for the toe and the sides. The shoe is now consigned to the lasting machine. By this wonderful contrivance a pincer travels around the edge of the sole drawing the upper into place and driving a tack part way in at each pull, so that every part of the upper is stretched in all directions equally. A second machine pays special attention to toes and heels, bringing the leather smoothly around the toe and fastening it in place by a tape or wire. By another, surplus leather is trimmed away and the vamp pounded to make it lie close to the last.

The lasted shoe, when ready for further treatment, is turned over to the "tack setter," who pulls out the tacks, leaving a few only to hold it in place; the insole is then wet and the shoe is ready for Goodyear welting.

This process adds greatly both to the comfort and the durability of the shoe. The insole has been previously prepared by the "channeler," a small machine that cuts a half inch slit along the edge of the insole inward, making a "lip," which the "turning machine"

turns up at right angles from the insole to be out of the path of the needle. The shoe, with the moistened insole uppermost, is placed in a machine and a narrow strip of sole leather, called the welt, is fed from the machine and guided from the "heel seat" around the shoe in such a manner as to project from the upper, while a curved needle sews through welt, upper, and the "channel lip" of the insole with a stout, waxed linen thread. The portion of the insole standing up inside of the shoe is later cemented down to cover the stitching. The addition of the welt has left a hollow space along the ball of the shoe; this must be filled in. In shoes of good quality the filling used is a mixture of ground cork and cement, plastered on the sole, which is passed over a hot roller until perfectly smooth.

It seems incredible that the attaching of the outsole should require a score of separate machines, but such in a machine-dominated factory is the case. A "cementing machine" smears a layer of cement over the welt, places the wet outsole upon the bottom of the shoe, and fastens it with a single tack. A "sole-laying machine" next by heavy pressure fits the sole closely to the last. An operator with his "rough-rounding machine" trims the edges of the outsole and slits its edge. The "channel-opening machine" turns up the lip, and only now is the outsole ready to be stitched. The "outsole lock-stitch machine" unites the sole and welt with a lock stitch of great strength, sewing through an inch of leather without the slightest difficulty, the stitch extending from the channel of the outsole through the upper side of the welt, where it shows in the finished shoe.

The outsole is now consigned to the "loose-nailing machine," which drives nails at the rate of 350 a minute through the heel seat and clinches them against the steel plate of the last. The edge of the outsole around the heel is trimmed by the "heel-seat pounding machine" and the whole sole rolled back and forth from side to side on the "automatic sole-leveling machine" to secure the result formerly obtained by the shoemaker with his lapstone.

The McKay process of attaching the sole is used in cheaper and heavier grades of shoes. No welt is used, nor is the insole channeled; the McKay machine sews the outsole, upper, and insole together at once, through the groove, and the lip of the outer sole is afterwards firmly cemented over the stitching, leaving no ridge.

In a "turned shoe" the lasting process differs materially from the two preceding; it is used exclusively in making women's fine shoes and slippers. There is but one sole, and that of fine, flexible leather. This is channeled, fastened to the last, the upper, turned inside out, is placed on the last and is tacked to the sole by a hand laster. The upper is sewed to the sole through the channel, leaving the heel part loose, and the shoe taken from the last and turned inside out by a singular machine operation. No process so far discovered produces

a flexibility comparable to that of the turned shoe. The lightness of the material and delicacy of the work, now, as in early days of the industry, demand women workers for many of the operations in a turned shoe. The lasting proper, however, is in many Lynn shops done by leather-aproned men in the old fashion with awl and waxed thread.

The heel to be attached is in a rough state when it arrives in the lasting room; it is first trimmed by machine, the breast is cut across to the desired slant, and the edges of the heel scoured. The heel may now be fastened to the shoe, for which process a variety of machines are in use. One of the latest both feeds and fastens the nails, and is operated by a man and a boy. It turns off work with great speed, leaving the nails slightly protruding above the heel. The top lift is next pressed into position over these nails, and the heel goes to the "universal slugging machine." This is devised to cut the "slugs" or small ornamental outside nails from a coil of wire and drive them into the heel where they show in the top lift. The lasting or making has been, until recently, given over to men as exclusively as the cutting. Yet in passing through the factories there will occasionally be seen a group of young women doing "assembling." It is a process better done by nimble fingers and too simple to be paid at men's rates. Girls do it more accurately than young boys, and as men will not take the low pay girls are often employed. Assembling, as is the case with skiving, is unsuitable for girls only because of its being done in the "men's room."

As to the other work in the lasting room, there is no question of its unfitness for women. Most of the operations must be done standing; the foot is frequently used in the manipulation of the machine; the muscles of arms and back are subjected to constant strain. Even men of slender build dislike lasting-room work.

The processes described above take place in the lasting rooms of most large factories and especially those where heavier shoes are made. Many firms producing women's shoes, especially in Lynn, by preference or compulsion still employ hand lasting. The hand laster, who uses strong pincers to pull the leather down over the form, must have knowledge of the way leather stretches, must exert strength in his pull, and exercise care to make his successive pulls equal in value. All this takes much time and demands high pay, notwithstanding which facts hand lasting is preferred for fine or delicate shoes.

FINISHING DEPARTMENT.

To this room are conveyed the shoes, now complete so far as concerns the joining of parts, but demanding various operations before being absolutely finished. Heel slugs must be ground down, heels and soles buffed or scoured, stained or blacked, brushed and polished,

the trade-mark stamped on, and the shoe finally passed to a boy or girl "tack feeler" who examines its interior for lurking tacks. A lining is also put inside the shoe, covering in some cases the heel only. After a final inspection to see that each shoe is properly nailed, the pairs are sent to the packing department.

PACKING DEPARTMENT.

In the packing room the product has its final handling; various treatments must be applied before the shoes are actually ready for packing. The shoe is placed on a "tree" or form like the last on which it was made; stain and dirt are removed and repairs made where certain imperfections are found. Hand operators "rag" or wipe clean the edges and heels and lace the shoes having eyelets. An inspector examines each pair, throws out the imperfect, and makes a record of them. At the packing tables the shoes are carefully mated, wrapped, and placed in paper cartons to be sent to the men packers, who fill and fasten the wooden cases of shoes for shipment. In large factories treeing, dressing, and packing may be done in different rooms; in the smaller ones the finishing and packing departments occupy one room. In both departments the majority of workers are women.

Such, in general, are the processes used in the production of a shoe. Some minor operations are omitted in this description and it should also be said that, in comparing factory with factory, differences in certain processes as well as in the order of their use will be found, differences due not only to local custom and to the quality of the product, but to individual preference or initiative.

DIVISION OF WORK BETWEEN MEN AND WOMEN.

A review of the various departments and operations in shoe factories confirms in general the statements of economists that men and women do not often work in competition in the same industry. Occupations are apt to be assigned to one sex or the other, and even when both work nominally at the same occupation there is apt to be a difference in the kind of work done or the methods employed. But while in the past this has been generally true in the shoe trade, gradual changes are now making particular exceptions which later may confirm the principle of noncompetition in a new way. The stitching room for half a century has been termed the women's room, but the high prices now paid for expert work at the machines, together with the difficulty of obtaining skilled women workers, has brought men invaders into this department, while a reversal of conditions is shown by the presence of women and girls in the sole-leather room. The influx of foreign labor opens the way to these changes. The in-

troduction of unskilled and disagreeable preparatory processes, for which the factory desires to pay as little as possible, brings into the foul-smelling basement of the factory foreign women who will work for small pay under conditions that repel the native or naturalized classes. However, the majority of women workers, as has been stated, are in the stitching room, a smaller number in the finishing and packing room, while in every room "table work" is done by women and minors. Outside of these occupations men perform all important operations in the factory, and are the foremen, managers, etc. Massachusetts women have not yet "broken into" the cutting rooms except for skiving, which process is, however, frequently done in the stitching room. The packing-room work, formerly done by men, is now almost completely in the hands of women. Women are also found in the lasting room at "assembling" machines, and also doing the eyeleting, buttonhole making, etc.

In the stitching room, vamping, usually the best-paid process, is now frequently done by young foreign Jews or youths from Southern Europe. The managers claim that they hold out longer than women on heavy work, especially cylinder vamping. Also, the law permits them to work longer hours than women, and in a rush season this is an advantage to the employer.

Shoemaking is peculiarly a matter of individual activity, and the operations in which a helper is required are so few as to be negligible. Close supervision of learners, therefore, is impossible, and for this reason, and because most of the operations are highly skilled, the number of minors employed is relatively small. Both boys and girls are used for unskilled handwork at the tables and for "floor work,"—that is, carrying materials, running errands, etc. In the stitching room girls under 18 are occasionally found at the simpler machines, but only by special brief privilege does a minor work on an important machine. In the finishing room boys and girls are frequently employed for small operations, as they are also in the packing room. It is not uncommon, however, to find factories where no minors are employed. The nonemployment of minors in the actual processes surely indicates the fact that shoemaking is a skilled trade and that at present the machinery in use can not, as in a cotton mill, do away with dexterity and judgment on the part of the operator.

LIST OF CHIEF TECHNICAL PROCESSES IN SHOE MANUFACTURING IN WHICH WOMEN ARE EMPLOYED.

[H., Hand process; M., machine process.]

Assembling (H.).—Tacking insole to last, placing box and counter in position, and putting upper on the last.

Backstaying (M.).—Stitching narrow leather strips over back seams.

Barring (M.).—Making short rows of stitching across bottom of upper opening.

Buttonholing (M.).—Making buttonholes by machine.

Buttoning (M.).—Putting buttons on by machine.

Cementing (H.).—Applying cement to the various parts to hold them together before stitching.

Closing (M.).—Putting two or more parts together.

Closing on (M.).—Stitching lining and outside together.

Crippling (H.).—Repairing imperfections.

Eyeleting (M.).—Putting in the eyelets with machine.

Folding (H. or M.).—Turning edges to be stitched.

Lacing (H.).—Running laces in shoes.

Making linings (M.).—Stitching back seam, sides, and top of linings.

McKay sewing (M.).—Sewing through both soles and upper so that sewing appears inside of shoe.

Packing (H.).—Placing a pair of shoes in a carton.

Perforating (M.).—Punching ornamental holes in tips.

Pressing (M.).—Using a "flat press" on heels and soles to make parts adhere.

Ragging (H.).—Cleaning completed shoes.

Repairing (H.).—Filling cracks in patent leather.

Skiving (M.).—Shaving leather to desired thickness in all parts.

Stamping (H. or M.).—Marking size and width on the inside of the shoe or marking parts of uppers that are to go together.

Staying (M.).—Putting on heel or other stays.

Table work (H.).—Matching parts, tying threads, trimming, pasting, etc.

Tip fixing (H.).—Repairing patent-leather tips.

Tongue stitching (M.).—Sewing tongue in vamps.

Top stitching (M.).—Stitching across the top and side of the shoe.

Turning (M.).—Turning upper right side out, or in fine shoes turning the whole shoe.

Vamping (M.).—Stitching the vamp to the upper.

METHODS OF LEARNING THE TRADE.

Thirty thousand women are to-day working in various branches of shoemaking in Massachusetts.[1] Where and how do they learn the processes connected with it, and how long a time is needed to make them competent wage earners? For the 2,500 women in shoe findings and cut stock shops the answer is simple—the work is of so elementary a character as to demand almost no instruction; the illiterate foreign women who mainly undertake it require for most of the processes scarcely as much direction as their male relatives receive from the overseer "bossing" a piece of street digging. Monotonous repetition of mechanical movements is easily acquired. Natural differences in mental endowment are manifest not in the degree of skill but of speed.

For the 27,500 women in factories working on the complete product the case is very different. All the processes are more technical, and for those connected with machine manipulation there are requisite

[1] Massachusetts Bureau of Statistics, Annual Report on the Statistics of Manufactures, 1911, p. 2:

Average number:

Shoe findings and cut stock	2,480
Boots and shoes	27,593

intelligence and dexterity, the first of which must be present in the learner, while the second must be gained through instruction. The Commonwealth supplies instruction for certain boys and men, namely, boys in the reformatory at Concord and men in the Charlestown prison. Not even in penal institutions, however, may a woman have free instruction in this means of livelihood. For her there are but two places where she may learn shoemaking—the factory or the shoe school. The great majority learn the processes in the former, yet the shoe school, as the more formal and definite method, deserves first consideration.

LEARNING IN A TRADE SCHOOL.

A shoe school has none of the furnishings that give an academic air to the ordinary schoolroom. Greasy machines replace the desks, pieces of leather strewn about in disorder, the books. Nor does a janitor perform even the most perfunctory of tasks between classes; sanitary regulations are in fact conspicuously lacking. The labor unions have no connection with shoe schools and are indifferent to their condition, while the health boards apparently leave them out of their lists. So far as could be learned there are no shoe schools in Greater Boston, and none in the shoe section of which Marlboro is the center. A good deal of training is given, however, in the factories of these centers.

The six schools found were all in Lynn or Brockton. The developed organization of the shoe industry in both cities makes them proper fields for shoe schools. In Lynn, however, the manufacturers prefer to train workers in their shops, since lack of uniformity and certainty in union regulations permits this method. Brockton offers the best conditions for shoe schools, as practically no shop teaching is given there.

Those who attend the shoe schools are, in growing proportion, of foreign birth. They range in age from 15 to 60 years, and many of them are illiterate. Frequently they have been in America only a few months and are so anxious to learn a trade quickly that in many cases they have borrowed the necessary tuition fee. The majority are men between the ages of 18 and 40; only about one-third of them have worked in shoe factories before entering the schools. The women are between 15 and 60 years of age; a larger proportion than among the men, though less than one-half, have had some experience in factories, usually only in the various kinds of unskilled table work. Few boys attend the schools, chiefly because the processes taught male workers require maturity in the learner. The training given to the two sexes differs not only in the character of the operations taught but in the degree of proficiency requisite. There is a distinct gap between the work done by boys and that done by men. A boy can be an errand or odd-shoe boy or can block out tongues in the

cutting room for several years without needing much training, but to get a man's job he must have special training either in a factory or school. Not so with the girls, for whom the line between unskilled and skilled work is less sharp. A chance to work in a factory is all they need, and, so far as their future economic welfare is concerned, it matters little whether they begin as table or machine workers. This explains the reason why a large proportion of the minors in the shoe schools are girls. They are learning table work or the less skilled stitching processes, anything that will give them access to a factory. Once this is gained, the capable girl can advance in time to the better-paying processes.

Two schools give instruction in stitching-room processes only, a third teaches all the operations necessary in making a "turned" shoe, while two others teach all processes except cutting and buttonhole making. The managers offer instruction only in those operations with which they are themselves familiar. Two schools have courses in vamping, top stitching, and skiving, because the managers know these special operations. The two schools teaching nearly all operations employ several instructors, and are making shoes on their own account in addition to running a school. Instruction in cutting is not given, since the cost of the material is high and the process is one requiring a long apprenticeship, which is permitted by the unions in factories. Buttonhole-machine operators have not been in much demand until the recent popularity of button shoes, and as the machine is complicated the process is not taught in shoe schools.

The majority of the students are naturally eager to learn the skilled operations. They usually choose one of the following processes, for which relatively high wages are paid: Goodyear welting, Goodyear stitching, edge trimming, vamping, pulling over, No. 5 lasting, edge setting, foxing, and tip stitching. Table work, which attracts many pupils, is an exception; it is chosen either by young girls or women well along in years; in either case they are not capable of the swift, sure manipulation necessary to run a power machine. There is a middle group of operations, which attract few pupils and require only a fair degree of skill; these are heeling and slugging, McKay stitching, buffing, scouring and breasting, nailing heel seats, hand lasting, and leather repairing.

Of the 29 processes taught, 8 only are open to women—vamping, skiving, foxing and tip stitching, top stitching, seaming and backstaying, stitching linings, patent leather repairing, and table work. The charge for teaching these processes in no case exceeds, and in but two, vamping and skiving, approaches $25. The time required to learn varies greatly; vamping is the most skilled process, and necessitates, according to the managers, from three to seven weeks for moderate proficiency, while skiving requires five weeks.

Foxing and tip stitching requires from four to six weeks. Stitching linings and patent leather repairing require but from one to three weeks, and the tuition is only $5, while the service given in table work is regarded as sufficient compensation for instruction in the simple and easily acquired processes.

The processes open to men are more skilled, the necessary machines more expensive, and the time required to learn longer, hence the tuition for seven of the most skilled processes ranges from $35 to $75. Goodyear welting, Goodyear stitching, and rounding require eight weeks to learn. Edge trimming, also considered very skilled, takes seven weeks to master. McKay stitching takes from two to five weeks to learn, while turn stitching and rapid stitching require from two to four weeks to master. These seven most skilled and remunerative processes are open to men only. Vamping, foxing, tip stitching, and skiving are the only skilled processes practiced by both women and men.

The amount of tuition charged in the different schools for the same process varies with the location and with the grade of work for which the pupils are prepared. When pupils are preparing to work on a cheap grade of shoe they do not need the skill expected of workers on a high-grade shoe, nor do they require much supervision; hence the lower tuition. One school making its own product claims to teach the less skilled stitching operations free, providing the girls do table work without pay for several weeks. No tuition is charged for table work because most of the work is unskilled and does not take long to learn. The girls can mark, trim, paste, and fold, and so reduce the cost of labor in producing a shoe. If later they wish to learn to stitch linings, to seam or to put in backstays, the firm promises to give the instruction without charge. The promise is not always kept.

All instruction in a shoe school is individual. When Harry Burns went to learn Goodyear stitching he paid $75 tuition and was put to work at once on a Goodyear machine. An instructor taught him to run the machine and started him at stitching on scraps of leather. Later he was initiated into the mystery of Goodyear stitching. In about six weeks he had "got the hang of the job," but he kept on for two weeks longer, as he wanted more skill and some speed. To find work in a shoe factory, although of necessity a nonunion one, was his next step. Six months in such a factory did wonders for him; in short, he had mastered Goodyear stitching. Next, friends, union members, who could vouch for the fact that he had been working at his trade for six months gained him admission to the union. Thereafter he secured work in a "closed" shop, where wages were higher.

Lilly Brown went through experiences somewhat different when she decided to become a vamper. Fortune favored her from the time

she paid $25 instead of $75 for tuition until she got work in a union shop immediately after she left the school. She had been taught in the school to stitch linings and backstays. Later she was advanced to the more difficult processes, top stitching, closing, foxing, undertrimming, tip stitching, and finally vamping. Harry had spent eight weeks in the school, and on leaving knew only one skilled process; Lilly in her six weeks' time learned several operations in addition to vamping. Neither was she compelled to work six months at her newly acquired trade before she could get a job in a unionized factory, for since the demand for skilled women workers is greater than the supply her union is not so strict as the unions for men.

Careless and haphazard methods characterize the general conduct of the shoe schools. The records kept are meager and usually take the form of a receipt giving the name of the pupil and the process he has chosen. Addresses of present pupils are seldom kept and those of former ones are unknown. It is therefore difficult to ascertain how many pupils have been enrolled in these schools during a given period, but it is certain that at any given time only a small proportion of those desiring to learn can be accommodated. So far as could be learned, the shoe schools of the State enroll altogether about 1,000 pupils at a time and teach 6,000 to 10,000 of both sexes during the year.

TABLE 12.—PROCESSES TAUGHT MEN AND WOMEN, TUITION, AND TIME REQUIRED TO LEARN.

[Based on the statements of managers of five shoemaking schools.]

Process.	Sex of pupils.	Cost of tuition.	Number of weeks required.
Goodyear welting	Male	$75	8
Goodyear stitching	Male	75	8
Rounding	Male	50	8
Turn stitching	Male	50	2 to 4
Rapid stitching	Male	50	2 to 4
Edge trimming	Male	$25 to 40	7
McKay stitching	Male	35	2 to 5
Heeling and slugging	Male	25	2 to 6
Cutting	Male	25	5
Lasting on No. 5 machine	Male	25	3
Skiving	Male and female	25	5
Bottom finishing	Male	25	2
Vamping	Male and female	20 to 25	3 to 7
Pulling over	Male	15 to 25	3 to 4
Edge setting	Male	20	4
Foxing and tip stitching	Male and female	15	4
Turn lasting	Male	15	2
Turning and beating out	Male	15	2
Buffing	Male	15	2 to 3
Scouring and breasting	Male	15	2
Top stitching	Male and female	5 to 15	4 to 6
Seaming and backstaying	Male and female	10	3
McKay lasting	Male	10	2
Nailing heel seats	Male	10	1
Hand lasting	Male	10	3
Leveling and stitch separating	Male	10	2
Stitching linings	Male and female	5	1
Patent leather repairing	Male and female	5	3
Table work	Female	0	3

LEARNING IN THE SHOE FACTORY.

Those who learn shoemaking in the factory may be divided, with reference to the conditions of their instruction, into three groups, namely, first, those who "pick up" knowledge of a process in a factory where regulations of management or labor unions forbid instruction; second, those working where self-instruction or casual teaching from fellow workers or foremen is permitted; third, those regularly taught by their employer, in the hope of their remaining with him permanently. The first class is found in some highly unionized centers, where teaching of new workers is forbidden, with a view to preventing overcrowding in the best jobs and consequent reduction of prices. They are found, too, in localities where skilled help is abundant and a sign on the factory door brings a dozen eager applicants, from whom the manager may choose at leisure. The experiences of the would-be instructed worker in these localities are always varied and sometimes sad. Ora, for example, gets a job as floor girl in the stitching room of a Marlboro factory. Her work is carrying stock to and from the women at the tables and machines. As she is alert and anxious to learn, she watches the different operations, and soon gains a fair idea of the simpler ones. Some time, when the foreman is scolding a worker at the other end of the room, she slips to a vacant machine and "has a try." Soon after a lining stitcher leaves or is moved up. Ora declares to the foreman: "If you will let me try linings, I am sure I can make good." It is as easy to let her try as to find a worker from outside, so she goes ahead, and, being intelligent, does "make good." It is safe to prophesy that she will advance steadily and rapidly.

The fortune of another girl of this class is different. Mamie Dunn obtains a job at sorting the smaller pieces of leather in the cutting room. Here is no opportunity to "pick up," for all the other work in the room belongs to men. She stays on for six months or perhaps a year and is still a sorter with a meager wage. She waits a little longer and then speaks to the foreman, but nothing happens. Then she begins to look about her and learns that in a neighboring shop a packer is wanted. She applies for the place and gets it by a "bluff"—that is, by claiming to be a packer. The work is simple and she does it successfully; it is also clean and pays fairly well, so Mamie is safely launched. But these are the more fortunate cases. Rose Ferrino has not the push of these girls. She goes into the shop and is put on pasting, an unskilled, poorly paid, and very dirty work. She pastes away patiently and does not try to learn anything else; not that she does not want to, but she does not know how to go about it. She is not naturally observant, all her training in school had to do with books and not things, so she stays where she is and nobody

pushes her on. Finally she gets "sick of it" and leaves. The foreman lets her go without demur, for he knows he can get some one better in a few hours. When she applies for a job at another factory she is asked what she can do. She replies "only pasting," and she is destined to do only this dull and unremunerative work so long as she remains in the factory, and that may be for many years.

We now come to the second group, found where union regulations are less strict and help less plentiful, or where an individual shop plans, by prospects of promotion, to make its force as stable as possible. Here the worker is allowed to practice on a machine in her spare moments. There are many days when there is no work for at least a half hour, and during that time much learning and teaching can be carried on among the workers. The foreman comes along from time to time and offers helpful comment. In the mornings and afternoons after the power is turned on the learner can sometimes practice on the machine of a worker who is late. She has chances to learn several processes and soon discovers the one she likes best or, more frequently, the one by which she can make most money.

The third is the fortunate group. In their neighborhood is a large factory which daily displays the notice, "Girls wanted to learn." It is usually an isolated factory—one which, owing to trouble with unions or desire for cheaper labor, has moved from a shoe center to a new community. Such a shop must face a double problem—that of finding workers and of training them when found. The offer of training serves two purposes—it attracts unskilled workers, and gradually supplies the shop with skilled help. Training is also given by a few established firms which realize the advantage of having their work done by their own methods instead of by those which each individual finds comfortable for herself. The system of teaching is practically the same in both classes of factories. Certain operators who have shown ability are selected for teachers and, as such, are paid about $20 a week. The learner is usually a child of 14 to 16 years of age who has just left school, and from the moment she enters the shop is under the care of the teacher. She is first put on table work, and while learning it is paid from $2 to $3.50 a week. If she shows any skill she is pushed on rapidly. When she reaches the machines she is first put on lining stitching, as it is light work, and the material, if spoiled, is little loss. From this she passes to stitching the smaller leather parts. She may not learn vamping, the most difficult of all the stitching processes, until she can stitch the several other parts of the shoe successfully. Few girls, however, learn a great many processes; the young worker will usually stay at the first on which she can make a fair wage, even though her employer urges her to advance. With the exception of vamping, there are no restrictions as to age in learning the various processes,

and young girls can master them in a short time. One teacher estimated that a girl beginning at 14 reaches her best and most rapid output at 19 years old. Her impetuosity is a help rather than a hindrance. She has no fear of her machine, is naturally swift in her movements, and less afraid of making mistakes than an older girl.

While the girl who picks up her trade or teaches herself can select the process which she likes best, the girl who is taught has usually less choice. Her employer considers himself the best judge of her capacity, while as a rule he puts her into the place where help is needed without consideration either for her feelings or her capabilities. This is probably one of the reasons why learners are unwilling to stay in the shops where they get so much for nothing.

The operations taught beginners in factories are all extremely simple. Workers in localities, however, where the trade may be picked up, frequently start on the more difficult processes. This is especially true of the women between 40 and 50 years old. Out of 214 women visited, who reported in various centers, 3 had begun as vampers, 12 as closers, 12 as buttonhole operators, 9 as backstayers, and 8 as top stitchers. One hundred and seven, exactly half the number, had begun on various machines.

It is evident that the burden of instruction is very unevenly divided among the factories, some assuming much and some very little. A few are so fortunate as to have a steady supply of skilled operatives trained in the neighboring shops, a condition found chiefly in small shoe centers where one shop pays better or is "nicer" than the others and consequently attracts the best workers. Where the trade is picked up, or learned at odd moments, the cost to the employer is very small, as a machine can be used only if it has been vacated by some one else and the learner can "try" only in the free time for which she is drawing no pay. On the other hand, the employer who trains all his help does so at heavy cost, made up of the wear and tear on machines, the power necessary to run them, the waste of materials, the wages of the teacher, and the wages of the learner. The value of the learner's product certainly does not balance this, while the training is made still more costly by the fact that a large number of the girl learners leave after they have reached the point at which they become valuable. A generally alleged reason for leaving is that they are "discontented." More definite explanation discloses various causes: Frequently they can not learn the process they wish; often the girl claims a high wage when she has mastered an operation, without realizing that she has not gained the speed which makes her production valuable; sometimes, too, the learner is put on piecework almost at the beginning, and as her output is very small she becomes disheartened and leaves.

The time necessary to learn processes in the factory is difficult to estimate, varying as it does with every operation and with every learner. To quote the skilled worker: "It all depends upon how smart you are." Table work, buttoning, and trimming threads take no time to learn; blacking and cementing can be mastered in from 5 to 15 minutes. The stitching processes naturally take longer, but each is a help toward the next. Were one to learn vamping at the start, it would take at least three months, whereas when it is taken up after several other stitching processes it is said that it can be mastered in one week.

The following table is based on information given by 214 women working in shoe factories:

TABLE 13.—TIME REQUIRED BY 214 WOMEN TO LEARN VARIOUS KINDS OF WORK IN THE SHOE TRADE.

[Based on personal statements of the women.]

Kind of work.	Less than 1 week.		1 week to 4 weeks.		1 month to 12 months.		Total.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
Machine:							
Skilled	17	24.0	29	40.0	26	36.0	72
Medium skilled	8	22.9	16	45.7	11	31.4	35
Hand:							
Skilled	6	26.1	14	60.9	3	13.0	23
Unskilled	55	65.5	27	32.1	2	2.4	84
Total	86	.....	86	.....	42	.....	214

When one considers the rapidity with which these operations are learned a trade school seems superfluous. Its main advantage would be to give the mastery of several processes, especially the skilled ones, so that the worker would be equipped to fill different positions. This equipment would double or treble the chances of getting a "paying job." It has been estimated that a bright girl of 16 or 17 could master in less than two years all the occupations open to women.

The citation of the "bright girl" raises a question. Given the same opportunity, or lack of it, what is it that makes some young workers succeed and others fail? The foreman will tell you that if a girl is bright and industrious, particularly the latter, she will soon become skilled, by "skilled" meaning she will possess the sum total of qualities necessary to make a good wage on piecework. As a matter of fact, however, nobody acquires skill in a shop. What she acquires is "speed"—that is, the power of handling things quickly though not necessarily correctly. A young assistant forewoman unconsciously summed up the matter very well when, in speaking of a sister whom she had trained, she said, "Anne could make nothing on linings so I put her on backstays; since then she has done well."

Stitching linings is a simple process paid for at a slender piece rate; it must therefore be done very rapidly if the worker is to make even a small wage; in other words, the key to success in this case is speed. Anne evidently had not and could not acquire this speed, so she was put on a harder job carrying a higher rate of pay. Here she succeeded for she had "skill"—that is, she could do a difficult thing, though she could not do it very quickly. Speed, then, is the one thing that can be acquired in the shop, and this comes with time and not with teaching. Speed and skill together make the key to success; but not all possess both qualifications. Scientific management could give skill and the next best gift, speed, to some who can not develop either unaided, but it would take a trained teacher to do it, and teachers are rare in the factory. There are few foremen who can stand over the young worker's machine and show her what is wrong in method and movements. The whole teaching of the operation is customarily summed up in, "Get up and let me show you."

The wage seeker, young or old, American or foreign, who chooses the shoe factory as his field will naturally balance the merits and defects of each method of learning. He will ask advice and receive it in bewildering variety. A foreigner will doubt his ability to win success without formal instruction in the trade; a young person with American notions will rely on "picking it up," or choose factory training. The advantages of the schools as at present managed are dubious. Certainly the pupils learn how to run a power machine, but the process it represents is seldom thoroughly mastered in the time they can afford to give. One woman interviewed had learned vamping in a school, but, in her own words, "got only a vague idea of vamping, and had a lot to learn when she began in the factory." Hers is no exceptional case. "They haven't had experience enough to work rapidly," explained one of the school instructors when accounting for the frequent failure of his pupils to hold factory positions. The hostility of the settled force to new workers is accounted for by a union official on the ground that the daily work is so correlated in amount as to meet the average output of a fair worker. Anyone who can not measure up to the average reduces the amount of work assigned, and therefore the earnings for the whole room. School-taught workers are so frequently laggards that every effort is made to shove them out. The fact of school training is seldom an advantage when an applicant interviews superintendents. The latter claim that the only advantage conferred by a shoe school is the acquisition of a certain self-confidence, and they ignore the fact that to a foreigner this is a very real advantage. Foremen and forewomen usually prefer the totally unskilled as beginners. Practically no

effort to place their pupils is made by the schools. Occasionally a bright pupil is helped to a good position, or during a rush season one or two of the advanced learners may be sent to a factory in response to a telephone call, but to secure work the rank and file must depend on their own efforts.

On the other hand, while the rigid limitation of numbers and of instruction in union centers is less severely felt in the women's rooms, it forces many young people to leave their homes and seek other centers where they may legitimately learn what they can acquire only surreptitiously at home. They have no attachment to the strange factory and will leave it for a familiar environment or for higher wages when they can. The possible establishment of publicly maintained trade schools equipped to teach shoemaking is viewed with little apprehension by the managers of private shoe schools, since a course planned to cover a year or more is not apt to draw pupils from the short-term courses. A public trade school, to supersede the inefficient shoe school and the usual haphazard factory teaching, must shorten the shoemaking course, yet make it possible for the pupil, without losing his position, to acquire proficiency by means of part-time or continuation instruction.

HOURS OF LABOR.

Factory people begin work early. The shoe workers pour into the passage marked "For employees only" as the whistles are shrieking 7 o'clock. In their respective workrooms they remain, with an hour's interval at noon, until 5. Since the 54 hours-a-week law for women became effective in January, 1912, the above has been the usual arrangement in Lynn. It is varied in certain factories by extending the hours on 5 days and closing at 1 p. m. on Saturday. This custom is almost universal in summer. Occasionally a factory begins work at 6.30 a. m. and closes earlier. The hours vary somewhat with the season, but the nominal 10 hours of work for 5 days with a short day on Saturday is growing in favor.

In Brockton the hours of beginning and ending work vary somewhat. Hundreds of workers come in from outlying towns by long-distance trolley, and as many more arrive by train. To accommodate these outsiders, many Brockton factories cut down the noon spell to a half hour and close work at 4.30 or 4.45 p. m. to allow their help to make trains. Saturday afternoon is not so frequently given as in Lynn, most of the shops running the same hours each day in the week, even in summer.

Overtime work is uncommon in shoe factories in Lynn and Brockton, and is rare in any well-run factory. On a few nights in the busy seasons the stitching room gets ahead of the lasting and dressing rooms and a few workers remain to catch up. In cold weather

leather cracks, the repair work increases abnormally, and girls are often requested to remain to finish an order. They are not compelled to do so, but, of course, a request from the manager is seldom refused. Nor are some women averse to earning the occasional extra pay.

In Marlboro and the towns of its section 56 hours was the usual working week before the recent law. At present the 10-hour day with a free Saturday afternoon is very popular. In some factories a 9½-hour day is preferred with a short day on Saturday. The preparation for a day's work and its winding up take as much time on a half as a whole day, so that any arrangement giving a short Saturday is costly to the management. Yet a discontented force is more costly, even in a nonunionized town. The free Saturday afternoon is fairly established in this whole region.

A 54-hour week was the custom in Boston even before the passage of the law. The work begins at 7.15 or 7.30; usually a half hour only is given at noon, and the factory closes at 5. But no custom is universal in the various sections included under the name of "Boston."

The 54 hours-a-week law went into effect January 1, 1912, and, when this investigation was made, had been in operation only a short time. Like a new broom it had swept clean, and evasions were yet uncommon. Nevertheless, there are factories in which the power is put on and workers voluntarily begin before the end of the noon hour.

WORKING CONDITIONS AND SANITATION.

The factory at which the workers arrive at 7 a. m. may be a six-story brick building of many windows and ample floor space, or a three-story wooden structure crowded and ill-lighted throughout. The better building is more common in Brockton and in Marlboro, while the largest factories in the outskirts of Boston are buildings of a model character. In the smaller towns, and conspicuously in the Lynn district, old frame structures, often forlorn and unsafe, are still in use.

The workrooms differ in character as widely as do the buildings, but the position of the stitching room in a factory and the general arrangement of the machines varies little. The usual plan is to provide the shoe with a steady journey of development from the top floor to the bottom. This gives the stitching room, in which are the majority of women workers, either a part of the top floor shared by the cutters, or the floor below the cutters. The women packers, who are the last to touch the shoe, are on the first floor nearest the offices. When a factory is small it frequently occupies one floor, high in a building, the first floor of which is given up to the offices of different firms. In most cases the main rooms in which women work are on the top floors. Yet elevators, except for freight, are extremely few.

Sometimes, but rarely, the women are allowed to use freight elevators between stated hours, a privilege commonly given only to those who present a doctor's certificate. The long flights of stairs to the fourth or fifth floor must be mounted twice a day.

The ordinary stitching room, where the majority of the women are found, is lighter than other rooms in the factory because higher up, but it is so crowded that it seldom gives an impression of being well lighted. Sometimes there are windows on all four sides of the room, but under these windows is a close double row of machines. Behind this double row is an aisle; but with racks of shoes standing about on the floor and floor girls hurrying to and fro, the aisle takes little from the air of congestion. Behind this aisle, again, in the center of the room, if machines are placed around all sides, or against the windowless wall when they are not, are the tables for the hand-workers. The first row of machines, therefore, has good light and air, the second a less but still tolerable supply. The table workers have the worst of the situation in every way; frequently their tables are placed in a close little space surrounded by high racks of shoes, where the younger girls work all day, cut off from daylight and good air.

But they are in no worse situation than the women downstairs in the packing room. This room, at the back of the first floor, always has poor light, its windows frequently opening upon some narrow alley between tall buildings. Since the task of packers and tip fixers requires close study of the shoe, the half daylight or artificial light is extremely trying to eyes and head. Further, while the air everywhere in the factory is heavy with the odor of leather, in the packing room and sometimes near the tables in other rooms, the odors from pastes and blackings used are particularly sickening. Better air is possible where there are plenty of windows, but the workers who spend 9 or 10 hours a day indoors are afraid of the cold, so the windows are kept closed. Any attempt at artificial ventilation is unusual.

Cleanliness is carefully maintained in the offices, but very little regarded in the workrooms. Usually a man is detailed to sweep up about the machines, but he is apt to sweep up only the scraps of leather, leaving dust thick in the corners. Even this slight aid is sometimes denied the workers, and they are forced to hire some one or to sweep, themselves, if they wish their places clean.

The habit of spitting upon the floor is common in the men's rooms, and men introduced into the stitching rooms do not always leave their habits behind them. The managers, however, often claim that women are more untidy and more neglectful of sanitary precautions than men, and that the efforts made in the best factories to secure better conditions are largely wasted from lack of cooperation in the

working force. The unions, especially in Brockton, have made some efforts to secure better conditions, but these efforts seem rather aimed to rouse the management than to give the workers themselves higher ideals.

The care of the toilets, legally the employer's affair, is also sometimes left to the women. In Lynn they are often obliged to hire some one to keep them decent; and while the money burden is light, the injustice of the arrangement is keenly felt by some. Toilets, separate for men and for women as required by law, usually on each floor, are always provided, yet they are seldom more than tolerably clean, and sometimes distinctly insanitary.

Dressing rooms, though necessary for the comfort and decency of the operatives, are to be found only in the best factories. A woman careful of her appearance always changes her street clothes for a costume suited to the conditions of the shop. It is neither convenient nor decent for her to change her dress in the stitching room itself; yet often the only dressing convenience she has is a nail driven in the wall above her machine. Where dressing rooms are found they are simply dark corners of the room shut off by wooden partitions and so small that in the rush at noon and at night the girls using them have scarcely room to turn about.

Lunch rooms in the shoe factories are not found in Lynn. One large factory, however, provides a clubhouse for its women employees, a delightful place where good meals are served at cost. But this is the only lunch room connected with a factory in Lynn. Other factories sometimes allow an outsider to come in and cook for the workers on a stove in one of the rooms; sometimes the workers cook for themselves. The women often bring tea or coffee in bottles and heat the beverage to drink with their cold lunches. But despite the added cheer, it is a bad practice to use the workroom as a lunch room. It prevents it from being aired in the absence of the workers and gives them no change from their surroundings, and therefore no real relaxation. Workroom conditions are too frequently detrimental to health and habits of self-respect.

Lack of proper conveniences is an evil, but in the stitching room it is not the chief evil. That, to a visitor, is the racking noise. Over the hum of the power belt and the whir of the stitching machines comes the rapid jar, clank, clank, clank of the eyeleting machine and the vicious whir-clank-stop of the Reece buttonhole machine; and through and above it all the teeth-on-edge shriek of the men's lasting machines below, making altogether a noise truly infernal. The workers themselves become used to it, declare that they do not mind it, and deny that it makes them nervous; they only regret that the effort to be heard in the workroom makes their voices loud, high-pitched, and harsh.

The physical conditions in the shoe factories of Lynn seem to indicate a center satisfied to be as it always has been—sordid but successful. The "fads" of dressing rooms and rest rooms and lunch rooms are felt to be all very well for other cities, but a waste of valuable floor space in Lynn. This is partly due to the fact that most firms do not own the buildings in which they manufacture; the owner, who builds for some unknown tenant, does not care to risk the loss of floor space that might prevent him from leasing.

In some of the modern factories variously located, conditions in the workrooms are as favorable to health and comfort as they can be made in a factory. One fine factory near Boston claims peculiar advantages in its workroom arrangements; nevertheless, the women stitchers are set so close together that each has an irritating consciousness of a neighbor's proximity. The racking noise from the buttonholing machines seems redoubled by this crowding.

Dust arising from the material subjected to the machine is not an injurious result of work in the stitching room as it is in the bottoming room. The actual manipulation of certain machines does, however, produce some physical injury. Operators on buttonhole and eyeleting machines are frequently forced to give up the work on account of "stomach trouble." The effect of these special machines upon the nerves is often disastrous.

The first impression made upon a visitor is the tremendous speed at which the machines are run. The rate is usually voluntary, yet an ambitious and practiced worker is under the temptation of using a speed that strains nerves and eyes. The pauses in the work so frequent in the stitching rooms, though they mean financial loss, are a relief to the strain and break the wearisome monotony of making the same number of stitches hour after hour on bits of leather identically the same.

The monotonous, often nerve-wearing, character of the work is the real cause of what sometimes appears caprice in throwing up jobs. "Tired of it" is one of the most frequent reasons assigned for the abrupt relinquishment of work. To get out and hunt for another kind of operation or to work in different surroundings is a coveted relief. Change of occupation within the same factory is often desired, especially by handworkers. Once on a fairly good job, there is sometimes for several years no decided desire for another. Then comes a day when the monotonous repetition wears through nerve endurance. Of 300 women interviewed in their homes, nearly 80 gave as a reason for leaving a job, "tired of it." On the whole, however, there is as much variety in the shoe work as in the clothing trades, and far more than in the textile mills or the majority of other factory trades. At present the machinery in use can not, as in a cotton mill, do away with dexterity and judgment on the part of the operator.

The selection of material, its adjustment to the machine, the inspection for perfection and finish, all create in the operator an individual relationship to his part of the product, even though he may never deal with a whole shoe. The "speeding up" complained of in the textile or box-making industries is not common; the worker usually runs the machine at the pace he desires, as it can produce good work only when guided by a clever hand. This feeling of responsibility is no doubt a main reason why many of the shoe workers, though but dimly aware of the cause, are not unsatisfied with their work.

CHAPTER IV.—WAGES OF WOMEN SHOE WORKERS.

INTRODUCTION.

No one statement in relation to conditions in the shoe trade is made more frequently or with a greater emphasis than that the wage scale is higher than that of any other factory industry. That this is a general conviction among wage earners and employers alike, there can be no doubt, but the causes assigned are as various as the characters of the informants. The owner of a factory quotes the free competition of an industry as yet unaffected by the trust tendency; the officials of the larger unions assert that organization of labor has succeeded in setting a reasonable wage standard, which, maintained in the larger centers, forces up wages even in unorganized localities; the practical directing force in the factory explain as a cause of high wages the skilled nature of the processes, demanding an intelligence commanding everywhere its price.

Doubtless these are all real conditions, and taken separately or together they make the weekly rates of wages relatively high. It remains for us to see, especially in the case of the women workers, whether they combine to make annual earnings adequate.

SOURCES OF INFORMATION.

To determine the accuracy of the impression generally prevalent as to the high reward of shoe workers and to measure this reward against some standard, several sources of information are available, namely, the reports of the State bureau of statistics, the general statements of employees and of wage earners, records from the factory pay rolls, and, lastly, interviews with workers in their homes.

As to the published statistics, valuable as they are for comparing one industry with another, they are admittedly of doubtful accuracy in the case of any special industry. The reports are obtained by sending blank forms to the manufacturers and are filled in by some member of the firm or of the office force. The desire to magnify the amount of business and to stand well in the matter of wage scale tends to exaggeration of numbers and expenditure, while in many cases factory records are so carelessly kept as to make the reports largely guesswork. These statements are chiefly useful in giving knowledge of general conditions and for comparisons among the several industries or with reports of previous years. The statements, too, of factory owners, officials, managers, and foremen only in exceptional instances afford reliable data for the details of wages and earnings. Their estimates may or may not come close to the facts. A source of information that will naturally first occur to the inquirer is the

worker himself. It is, however, a common experience in industrial research to find that where no written record is kept the worker is but vaguely aware of the exact amount of his earnings for any long period of time. The amounts, for reasons that will suggest themselves, are under or over stated. Real accuracy can be secured only by the laborious copying of well-kept pay rolls, in which the name and special occupation of each worker is stated, with the amount of weekly earnings paid.

WAGES AND EARNINGS AS SHOWN BY RETURNS OF MANUFACTURERS.

While the pay rolls must be the final criterion in this study, it will help, nevertheless, in the discussion of earnings in the shoe industry to make some comparisons and estimates based on the returns made by manufacturers to the State bureau of statistics. For the purpose of such a comparison, in Table 14 are given 11 Massachusetts industries employing over 2,500 adult women, with the number and per cent of men, women, and minors and the wages they received. Unfortunately the State bureau does not give the average weekly and annual wage for the three classes of wage earners separately. This was learned for special groups from other sources and will be quoted later.

TABLE 14.—COMPARISON OF CHIEF MASSACHUSETTS INDUSTRIES AS TO NUMBER OF MEN, WOMEN, AND MINORS EMPLOYED AND THEIR WAGES.

Industry.	Workers and wages in industry specified.					
	Persons employed, 1911.[1]		Average wage for week ending Dec. 16, 1911.[2]	Average wage for all workers for week ending Dec. 16, 1911.	Average annual earnings for all workers.	
	Number.	Per cent.			1910.[3]	1911.[4]
1. Cotton goods:						
Men	53,826	48.1	$9.83	.....	.....	.....
Women	44,386	38.6	7.91	.....	.....	.....
Minors	13,793	13.3	5.92	.....	.....	.....
Total	112,005	100.0	.....	$8.59	$412.09	$407.80
2. Boots and shoes:						
Men	52,980	61.7	15.17	.....	.....	.....
Women	26,875	31.3	10.39	.....	.....	.....
Minors	6,038	7.0	6.43	.....	.....	.....
Total	85,893	100.0	.....	13.06	586.64	594.15

[1] Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, pp. 90–133.

[2] The average wage was secured from the classified wages for men, women, and children by taking the mid-value in each class group as the average wage and multiplying it by the number of wage earners in that group. The sum of the total earnings thus obtained for each class was then divided by the total number of wage earners in that class, and the result was regarded as the average wage. In the case of the group "Under $3," $1 was used as the lower limit, making a mid-value of $2, and in the "$25 and over" group, $25 was taken as the value, the personal statements obtained from the women indicating that the number in this industry receiving more than $25 was too small to justify the use of a greater value than $25.

[3] Massachusetts Bureau of Statistics, Twenty-fifth Annual Report on the Statistics of Manufactures 1910, pp. 1–12.

[4] Idem, 1911, pp. 1–12.

TABLE 14.—COMPARISON OF CHIEF MASSACHUSETTS INDUSTRIES AS TO NUMBER OF MEN, WOMEN, AND MINORS EMPLOYED AND THEIR WAGES—Concluded.

Industry.	Workers and wages in industry specified.					
	Persons employed, 1911.[1]		Average wage for week ending Dec. 16, 1911.[1]	Average wage for all workers for week ending Dec. 16, 1911.	Average annual earnings for all workers.	
	Number.	Per cent.			1910.[1]	1911.[1]
3. Woolen and worsted goods:						
Men	28,689	54.2	$11.20	.....	.....	.....
Women	17,958	30.1	8.57	.....	.....	.....
Minors	6,088	15.7	6.21	.....	.....	.....
Total	52,735	100.0	.....	$9.73	(1)	$460.17
4. Electric machinery and supplies:						
Men	13,884	75.0	14.47	.....	.....	.....
Women	2,768	14.9	8.36	.....	.....	.....
Minors	1,872	10.1	6.55	.....	.....	.....
Total	18,524	100.0	.....	12.75	$600.20	605.08
5. Paper and wood pulp:						
Men	9,153	65.1	12.48	.....	.....	.....
Women	4,338	30.9	7.13	.....	.....	.....
Minors	567	4.0	6.63	.....	.....	.....
Total	14,058	100.0	.....	10.59	513.47	519.13
6. Hosiery and knit goods:						
Men	2,445	26.2	11.54	.....	.....	.....
Women	5,460	58.5	7.87	.....	.....	.....
Minors	1,433	15.3	6.12	.....	.....	.....
Total	9,338	100.0	.....	8.56	396.20	395.10
7. Boots and shoes, rubber:						
Men	4,430	54.6	12.90	.....	.....	.....
Women	3,173	39.1	9.39	.....	.....	.....
Minors	503	6.3	6.19	.....	.....	.....
Total	8,106	100.0	.....	11.11	509.99	479.89
8. Confectionery:						
Men	1,540	22.5	12.08	.....	.....	.....
Women	3,412	49.8	6.70	.....	.....	.....
Minors	1,901	27.7	4.73	.....	.....	.....
Total	6,853	100.0	.....	7.37	346.07	348.37
9. Clothing, women's:						
Men	1,254	22.2	16.63	.....	.....	.....
Women	4,032	71.4	8.55	.....	.....	.....
Minors	359	6.4	5.01	.....	.....	.....
Total	5,645	100.0	.....	10.12	456.09	469.61
10. Clothing, men's:						
Men	2,461	45.6	14.94	.....	.....	.....
Women	2,785	51.6	7.93	.....	.....	.....
Minors	154	2.8	5.31	.....	.....	.....
Total	5,400	100.0	.....	11.05	511.12	605.01
11. Hats, straw:						
Men	1,239	31.8	14.07	.....	.....	.....
Women	2,563	65.8	11.63	.....	.....	.....
Minors	92	2.4	6.52	.....	.....	.....
Total	3,894	100.0	.....	12.29	550.06	569.74

[1] See p. 59 for notes to these columns.

With due allowance for error in the returns several significant facts are brought out by this comparison. In average annual earnings for all wage earners electric machinery and supplies in 1910 ran considerably ahead of the boot and shoe industry, a differ-

ence lessened in 1911; in average weekly wage for all earners boots and shoes were also slightly behind. A glance at the proportions of the three classes of earners makes it clear that the higher average in the electrical works is due to the small per cent of adult women employed. Their relatively low wage does not pull down total earnings to the boot and shoe level, since the 75 per cent of adult men receive a weekly wage almost double that of the women. In the boot and shoe industry the men's average wage is over $1 per week lower than in the electrical works, but the 26,875 adult women making boots and shoes receive an average weekly wage about 50 cents more than their 2,768 sisters dealing with electrical machinery. In both of these industries the average wage for all wage earners runs ahead of that in the others listed. In the case of the boot and shoe workers this is certainly due to the higher wage for women. So far, then, the statistical statement confirms the common assertion; the boot and shoe industry does pay nearly the highest annual as well as the highest average weekly wage, and this is paid to over 85,000 workers, one-third of whom are women and girls.

Averages for weekly or annual earnings may be misleading, however, as related to the general body of workers. A few highly paid workers at the top of the scale may raise the whole average to a figure which is only arithmetically a truth. Further analysis of the wage scale is necessary to show what proportion of the earners receive the specified average amounts.

We take, then, the bureau's table of classified weekly wages for the week of employment of greatest number of wage earners in 1910, for the 11 leading industries, and classify the earnings under specified amounts, women wage earners 18 years and over alone being considered.

TABLE 15.—WEEKLY WAGES OF WOMEN 18 YEARS OF AGE AND OVER IN 11 LEADING INDUSTRIES IN WEEK OF MAXIMUM EMPLOYMENT, 1910, BY CUMULATIVE PERCENTAGES.

Source: Massachusetts Bureau of Statistics, Twenty-fifth Annual Report on the Statistics of Manufactures, 1910, pp. 90–137.]

Industry.	Per cent of women 18 years of age and over earning specified wages.					
	Under $6	Under $8	Under $9	Under $10	$10 or over.	$12 or over.
Cotton goods	17.6	56.1	75.2	88.8	11.2	1.8
Boots and shoes, leather	12.3	31.2	42.9	56.9	43.1	25.8
Woolen and worsted goods [1]	12.8	54.0	69.1	77.5	22.5	9.2
Hosiery and knit goods	27.8	62.8	76.6	87.3	12.7	3.4
Clothing, women's	19.8	48.5	63.2	76.1	23.9	10.7
Paper and wood pulp	18.6	76.8	92.2	96.6	3.4	.9
Confectionery	47.2	82.8	91.7	94.5	5.5	1.5
Boots and shoes, rubber	5.4	23.6	40.4	77.0	23.0	5.5
Clothing, men's	21.1	56.7	71.6	83.3	16.7	5.6
Boxes, paper	25.0	56.0	70.5	83.4	16.6	6.9
Electric machinery and supplies	19.6	50.6	73.9	87.1	12.9	2.7

[1] Given in the State report for 1910 as separate industries.

According to Table 15, 43 per cent of the women in shoe factories earned less than $9 for the busiest week, while in all other industries, except the rubber boots and shoes, the number earning under $9 varies from 63 to 92 per cent. When the wage reaches $9 and over, the other industries are far behind boots and shoes; only 57 per cent of its women workers earned under $10, while 43 per cent earned $10 or over. In other words, about 11,500 women, or 2 in every 5, earned $10 or over in the shoe factories, while of the women in the cotton mills only about 5,200, or 1 in 10 or 11, earned $10 or over. When the last group is reached, those earning $12 and over, the shoemaking women have shot far ahead in the race. In the woolen and worsted factories an average of 1 worker in 10 made $12 or over in the best-paid week, while the shoe factories paid that amount to 1 woman in every 4. Further, if all adult women earning $15 or over for the busy week are grouped we find among shoe workers 1 in every 10 in this class, in woolen and worsted goods and in rubber shoes about 1 in every 100, while in the cotton, paper, and electrical supplies factories only 1 woman in 500 made $15 and over in the busiest week.

Again, as concerns a proposed "minimum wage" of $9 a week, we take the average wages for 1911 as given and group them for 11 selected industries, as in Table 16, in order to show the proportion in each industry earning $9 and over as well as $10 and over.

TABLE 16.—EARNINGS IN THE THIRD WEEK OF DECEMBER, 1911, OF WOMEN 18 YEARS OF AGE AND OVER.

[Source: Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911.]

Industry.	Per cent of women 18 and over earning—	
	$9 and over.	$10 and over.
Cotton goods	27.4	12.8
Boots and shoes, leather	61.4	46.7
Woolen and worsted goods	33.4	24.8
Electrical machinery and supplies	31.4	19.3
Paper and wood pulp	5.5	2.5
Hosiery and knit goods	29.3	15.8
Boots and shoes, rubber	62.4	42.9
Confectionery	7.9	4.6
Clothing, women's	27.4	15.3
Clothing, men's	27.5	15.7
Hats, straw	67.8	54.9

Here the two shoe industries—leather and rubber—stand as leaders of the group in the proportion of workers receiving the minimum wage of $9; the workers in the rubber shoes do, indeed, run slightly ahead. In the latter trade, however, the number earning $10 per week and over represents a proportion far below that in the leather

shoe industries. Comment on the significant facts made clear by this table need not here be amplified. The adult woman who can exercise free choice as to the industry she will enter will on this showing, if a wage of at least $9 be her main object, choose, above all others, the industry making rubber shoes. If she aim at $10 and over, she will make a vigorous effort to get into the shoe factory and be one of the 11,000 or more women whose skilled work commands this wage.

This study of the published statistics furnished by the heads of various industries confirms the general statement so far as it relates to the wage attainable at special periods. When work is plenty and the factories full and women for the most part working on full time, the shoe factory pays not only the highest wage to women, but pays this wage to the highest number of workers.

WAGES AS SHOWN BY PAY ROLLS.

The real value of the results obtained by study of published statistics must, however, be judged by comparing them with those obtained by other methods of investigation. The State statistics give the total number of adult women in shoe factories making the complete product in 1911 as 27,593. The pay rolls copied for this investigation from factories in the chosen centers include records for 4,400 women, or 16 per cent of the total number employed in the State. The wages from these pay rolls have been classified for three centers and are, in Table 17, compared with those for the whole State.

TABLE 17.—ACTUAL WEEKLY WAGES OF WOMEN 18 YEARS OF AGE AND OVER FOR WEEK OF EMPLOYMENT OF GREATEST NUMBER.

[Based on pay rolls.]

LYNN.

Establishment.	Number and per cent earning—				Number and per cent earning—			Total.
	Under $6	Under $8	Under $9	Under $10	Over $10	Over $12	Over $15	
The State[1]	12.3	31.2	42.9	56.9	43.1	25.8	10.3	.....
Factory No. 1:								
Number	91	153	187	223	173	124	44	396
Per cent	22.9	38.6	47.2	56.3	43.7	31.3	11.1	.....
Factory No. 2:								
Number	85	133	153	190	68	39	12	258
Per cent	32.9	51.6	59.3	73.6	26.4	15.1	4.6	.....
Factory No. 3:								
Number	30	59	84	98	70	38	13	168
Per cent	17.9	35.1	50.0	58.3	41.7	22.6	7.7	.....
Factory No. 4:								
Number	10	14	18	20	22	10	5	42
Per cent	23.8	33.3	42.9	47.6	52.4	23.8	11.9	.....
The 4 factories:								
Number	216	359	442	531	333	211	74	864
Per cent	25.0	41.5	51.1	61.5	38.5	24.4	8.6	.....

[1] Figures for the State are based on Twenty-fifth Annual Report on the Statistics of Manufactures, Massachusetts Bureau of Statistics, 1910, p. 94.

TABLE 17.—ACTUAL WEEKLY WAGES OF WOMEN 18 YEARS OF AGE AND OVER FOR WEEK OF EMPLOYMENT OF GREATEST NUMBER—Concluded.

BROCKTON.

Establishment.	Number and per cent earning—				Number and per cent earning—			Total.
	Under $6	Under $8	Under $9	Under $10	Over $10	Over $12	Over $15	
Factory No. 1:								
Number	27	74	86	120	127	78	38	247
Per cent	10.9	29.9	34.8	48.6	51.4	31.6	15.3	.....
Factory No. 2:								
Number	9	32	55	79	88	53	19	167
Per cent	5.4	19.2	32.9	47.3	52.7	31.7	11.4	.. ....
Factory No. 3:								
Number	19	38	51	74	110	57	21	184
Per cent	10.3	20.6	27.9	40.2	59.8	30.8	11.4	.....
The 3 factories:								
Number	55	144	192	273	325	188	78	598
Per cent	9.2	24.1	32.1	45.7	54.3	31.4	13.0	.....

MARLBORO.

Factory No. 1:								
Number	28	60	76	88	21	6	2	109
Per cent	25.7	55.0	69.7	80.7	19.3	5.5	1.8	.....
Factory No. 2:								
Number	25	82	109	171	139	68	16	310
Per cent	8.1	26.5	35.2	55.2	44.8	21.9	5.2	.....
Factory No. 3:								
Number	40	92	114	139	43	8	1	182
Per cent	21.9	50.5	62.6	76.4	23.6	4.4	0.5	.....
The 3 factories:								
Number	93	234	299	398	203	82	29	601
Per cent	15.5	38.9	49.7	66.2	33.8	13.6	4.8	.....

The records show for the several localities a wide difference in the distribution of wage groups, a difference to be discussed later. Our present interest is in the fact that the proportions earning small wages, namely, less than $6 or $8 or $9 per week, are in Lynn and Marlboro larger than those given in the statistics for the State. The pay rolls for Brockton represent nearly 18 per cent of the total number of female employees in that town, those for Lynn over 15 per cent, and those for Marlboro 27 per cent. The wages paid in the scattered inland towns are lower than those of the four centers investigated, as well as of all the larger towns with the exception of Haverhill. It is possible that the actual weekly earnings for the maximum week are overstated in the reports made to the State.

CLASSIFICATION OF WORKERS AND METHODS OF PAYMENT.

In any shoe factory where the work is really organized there are found two classes of workers concerned in the actual product. These are the handworkers and the machine operators. "Day workers" or "floor workers" as they are variously called, a few of whom are in each department of large factories, are boys and girls usually under 16 years old. They do a variety of odd jobs, as carrying orders or carrying stock to and from the machines, and though usually classed

with the handworkers they really have no more to do with the making of a shoe than the bootblack on the corner. Outside of these classes are the usual wage or salary earning employees, such as drivers, sweepers, and machinists among the men, and the office and superintending force made up of both men and women. Their duties and earnings differ little from those prevailing in any organized industry and will not here be considered.

As there are two classes of workers in the making of a shoe, so there are two methods of paying for the work, namely, by time and by piece. Were each used for one class of workers only, consideration of the wage question would be greatly simplified. As a fact, piece payment for both classes is the general method, the exceptions to which are due to special conditions relating to the work. Beginners on table work or on cementing and blacking processes are usually put on payment by the hour, as otherwise their scanty earnings would be too discouraging. If, however, the beginner is seen loitering, she is promptly put on a piece-rate basis. Time payment is also made in cases where quality rather than quantity is of prime import. The men cutters in the best-managed shops work on time, as the hurried placing of patterns would mean great waste. In the stitching room the operator making sample shoes is paid by time, so in the packing room is the woman who gives the shoe a final inspection. In both cases mistakes due to haste would be fatal to the reputation of the firm. Among the handworkers the proportion paid by time, as learned from the pay rolls copied for this investigation, is usually less than 20 per cent, but in two or three factories it runs as high as 30 to 40 per cent and over. This variance is due less to local custom than to the quality or character of the product.

HANDWORKERS AND THEIR WAGES.

The work of the majority of handworkers does not differ in its nature from the strictly manual work done in other industries. Marking, matching pieces, tying or cutting threads, pasting, labeling, cleaning, etc., are also done in factories making boxes, paper goods, corsets, and many other kinds of products. In the actual movements and the amount of intelligence required, the work in these other factories is not dissimilar to that done in shoe shops, nor is the term "unskilled," usually applied to handwork, correct, except in a limited sense. In the shoe factory, as elsewhere, manual operations require accuracy of eye and touch, precision and dexterity of handling, together with the acquirement of a certain rate of speed which practice must render uniform. These qualities where really developed make the worker "skilled" in as true a sense if not to the same degree as the wood carver or the stonemason.

Among the handworkers in the shoe factories, the least skilled are those found in the sole-leather department, if there is one. Their work, described in Chapter III, requires little judgment and less dexterity, while the pieces of leather they handle are of less value than those in the workroom above. This kind of handwork is paid for, therefore, at rates lower than those prevailing in the packing or stitching room. The foreign women introduced into the sole-leather department of late years will work for this lower wage until they are partly "Americanized." They are constantly leaving for better work or to enter other factories, but others more newly "over" are ready to take their places. Heel builders are paid by the piece and earn the highest wage given in the sole-leather department; among the steady and continuous workers $10 or $12 per week is a common wage.

In the packing department the handworkers earn higher wages, equal in many cases to those of machine operators. It is the experienced handworkers in the packing and stitching rooms who help to make up the 9 or 10 per cent earning $9 or $10, and the smaller proportion earning as high as $15 a week. They deal with the product in its most valuable stage of practical completion, and upon their care depends its final quality.

In general, the average wage of the handworkers runs below that of the machine operator, though this difference varies with locality and type of product. As compared with wages paid for handwork in other industries, the scale in the shoe factories is much higher. This fact seems to be related to certain conditions peculiar to the industry. Among these is the value of the individual parts handled by the operator. In some industries spoiling a certain proportion of the material is not a serious loss; in the shoe industry it is, and, therefore, to handle the pieces, better skill and brains must be hired. These command their price. Again, the handwork is closely related to the machine work, so that in the stitching room especially, the two classes of workers are in constant cooperation. The general scale of stitching-room prices comprehends piece operations, whether done by machine or hand.

Two facts of importance in relation to women handworkers in shoe factories should be noted: First, the work is not for the most part unskilled, but demands the qualities essential in the machine operator; second, the wage for steady adult handworkers, while below that of the machine operators, is, on the whole, higher than that earned for work of a similar kind in other industries.

Comparison between average wages of the two classes of workers for one large factory in each of the several localities is given in Table 18.

TABLE 18.—AVERAGE WEEKLY WAGES OF ADULT HANDWORKERS AND MACHINE OPERATORS WORKING 46 WEEKS OR MORE IN THE YEAR.

[Based on pay rolls of 4 factories.]

One large factory in—	Handworkers.						Machine operators.					
	Number.	Average wage.	Number and per cent earning—				Number.	Average wage.	Number and per cent earning—			
			$9 and over.		$10 and over.				$9 and over.		$10 and over.	
			Number.	Per cent.	Number.	Per cent.			Number.	Per cent.	Number.	Per cent.
Brockton	24	$9.70	13	54.2	9	37.5	63	$10.48	52	82.5	35	55.5
Lynn	93	8.00	40	43.0	37	39.7	147	9.50	98	66.7	79	53.7
Marlboro	60	7.92	19	31.7	11	18.3	131	8.76	66	50.4	43	32.8
Chelsea	62	7.82	16	25.8	10	16.1	100	8.62	47	47.0	27	27.0

The steadiness with which the women dealt with in this table are at work is fair evidence that they are responsible workers whom the employers desire to retain even through the slack times. It is reasonable, therefore, to suppose that their wages show what the better grade of workers in each class may receive. The handworkers in every case earn less than the machine operators, but the difference ranges from 78 cents in Brockton to $1.50 in Lynn. The figures for Lynn are exceptional; in the other three towns the difference ranges only from 78 to 84 cents, the smallest difference being shown in Brockton, where both hand and machine workers have the highest earnings.

With regard to the suggestion of a minimum wage of $9 a week, it is noticeable that the proportion of handworkers who earn as much or more than $9 is strikingly small, being only a little over half in Brockton and running down to about one-fourth in Chelsea. The machine operators make a better showing in this respect, but even among them the proportion falling below $9 ranges from nearly one-fifth to over one-half.

MACHINE OPERATORS AND THEIR WAGES.

If the processes among handworkers in the shoe factory do not differ essentially from hand processes elsewhere, the contrary is true of the chief work in the stitching room. Only so far as it is stitching does it resemble any other factory work. Otherwise not only in the material and the machinery but in the great variety of "pieces," the stitching of shoes involves processes not only peculiar but so extremely various that each has its separate valuation on the price list. Consideration of conditions affecting the make-up of the wage must first take into account the great variety in operations and prices, resulting from the modern organization of shoemaking, for it is chiefly

this that makes the method of piece payment universal in the industry and inclusive of almost its entire working force.

The piece prices have certain relative ratios for different operations, but in each special case they are subject to a constant variation dependent on the nature and value of the product. A vamper, for instance, may work one week to complete an order demanding vamps paid for at the rate of 16 cents per dozen pairs; the next week the order may call for vamps worth 11 cents a dozen pairs. Various methods are used to fix the new rate demanded by a new cut or shape, among which the following is common: A skilled or "sample" stitcher, who can stitch all parts of the shoe, is given the vamping in a new style of shoe to stitch for a 10-hour day. She is paid the maximum rate, say, 25 cents an hour. She is found able to stitch 200 pairs in 10 hours, or 20 pairs in one hour. It is clear that if 20 pairs are worth 25 cents, 12 pairs are worth 15 cents, and the latter is fixed as the rate. The piece rate is, then, at bottom, a payment for so much time. Though some of the operators will stitch the 20 pairs of vamps, or even more, in an hour, it is evident that the majority will not attain the speed of the expert stitcher. This is especially true of operations done by the less experienced. Were the piece price translated into a time rate, it would seldom, indeed, reach 25 cents an hour. The piece rate is usually per dozen pairs of shoes, except for making buttonholes and putting on buttons, which are paid for by the hundred. The variety of operations and of piece prices are illustrated below by sample schedules taken from factory pay rolls. In cases where the product shows great variety, the diversity in the scale of piece prices becomes bewildering. It reaches the extreme point in some of the Lynn factories, where men's, women's, youths', misses', children's, and infants' shoes of various materials and styles are all made under one roof. The result is a complex schedule of payment for each operation.

TABLE 19.—NUMBER OF PRICES PREVAILING IN SHOEMAKING OPERATIONS PAID BY THE PIECE.

Operations.	Number of prices.	Operations.	Number of prices.
Hand operations:		Machine operations—Concluded.	
Blacking	4	Buttonholing	4
Button sewing	1	Closing	5
Cementing	3	Eyeleting	3
Counting	3	Perforating	6
Finishing	3	Pressing	3
Marking	7	Skiving	5
Packing	6	Staying	6
Pressing	7	Toe closing	2
Rubbing	2	Fancy stitching	2
Trimming	4	Stay stitching	6
Tracing	5	Strap stitching	3
Tying ends	2	Tip stitching	6
Machine operations:		Tongue stitching	6
Barring	3	Top stitching	8
Backstaying	9	Vamping	11
Binding	9	Zigzagging	3
Button machine	2		

TABLE 20.—PIECE PRICES PAID FOR OPERATIONS ON DIFFERENT GRADES OF SHOES IN THE SAME FACTORY.

Operation.	Price per dozen pairs.	Operation.	Price per dozen pairs.
Closing seams:		Staying:	
1 seam, leather	$0.07	Button shoes	$0.08
2 seams, leather	.14	2-strap velvet	.15
2 seams, cloth	.18	2-strap satin	.18
2 seams, velvet	.25	2-strap plain	.20
"Ooze" button shoes	.40	2-strap velvet	.25
Top stitching:		Vamping:	
Button shoes	.50	Button oxfords	.50
Polish shoes	.40	Flat circular vamp	.75
Button oxfords	.50	Flat blucher	.90
Button oxfords, 2 straps	.60	Flat blucher, with barrings	.20
Button oxfords, 3 straps	.90	Cylinder button with close row	1.20
Pumps	1.20	Cylinder button with overlap	2.10

At first sight it would seem that the stitcher doing the tops of pumps at $1.20 per dozen pairs would make a much higher wage than her neighbor sewing the tops of button shoes at 50 cents per dozen pairs. She probably does make and deserve more, as the finest work is given to the expert stitcher who will not spoil it. Nevertheless the difference in rate represents pretty closely a difference in the amount of time required, and the two variations tend to create a balance in the main satisfactory to each worker. Unusual skill has value always difficult to estimate; it is not easy to decide whether this is really rewarded by the piece method of payment.

Not only is there great variance in the scale of prices for the different varieties of each process, but the occurrence of a change is usually impossible to foresee. The stitcher seldom knows what variety of her special operation she will be given in a succeeding month or even week. Hence, she can not know her rate of payment. The finer her work and the better the grade of shoe, the more pronounced is this uncertainty. Yet this uncertain piece price is the most important factor at the basis of her wage. How much must be done at a specified rate in selected operations in order to make $10 a week is shown from the pay-roll records of a large factory, as given in Table 21.

TABLE 21.—PIECE RATES IN A LYNN FACTORY WITH NUMBER OF PIECES HANDLED TO MAKE $10 PER WEEK.

Operation.	Rate.		Number pieces handled at—	
	High rate.	Low rate.	High rate.	Low rate.
Backstaying ..... per dozen pairs..	$0.10	$0.04½	2,400	5,328
Barring ..... do....	.02	.01	12,000	24,000
Beading ..... do....	.04	.02	6,000	12,000
Closing on ..... do....	.03½	.03	6,840	7,992
Foxing stitching ..... do....	.14	.08	1,704	3,000
Lining stitching ..... do....	.06	.02	4,000	12,000
Perforating ..... do....	.07	.03½	3,420	6,840
Second-row stitching ..... do....	.07	.02	3,420	12,000
Tip stitching ..... do....	.03	.03	7,992	7,992
Tongue stitching ..... do....	.05	.03	4,800	7,992
Vamping ..... do....	.17	.10	1,392	2,400
Buttonholing ..... per hundred pairs..	.04	.04	25,000	25,000
Eyeleting ..... do....	.03	.01	66,666	100,000

Piece prices show bewildering variety not only for operations in the same factory, but for work, apparently of a similar sort, done in different factories. The similarity is usually apparent only; a slight difference of cut in the shoe means a few stitches more or less, and where stitches are literally counted, the count affects the price. Comparison between factories is, therefore, futile unless both turn out practically the same product made by precisely the same processes. Such an identity we have not found.

A second uncertain element in the wage is the behavior of the machine which, however wonderfully adapted to the business in hand, has a soulless insensibility to the exigencies of the work or the economic need of the worker. The Singer sewing machine used is heavy and strong in its framework, but necessarily delicate in the parts that do the stitching; the Reece buttonhole machine has a complicated mechanism liable to disarrangement. Care and management of the machine are part of the daily task, but the time taken for repairs is not paid for. Occasionally a serious breakdown occurs; if, then, there is no similar machine in the room for her to use, the operator's work is stopped for the day, possibly for two or three days. It is to the interest of the factory that such loss of time should be minimized, but all the machines can not be kept in perpetual running order, even under the best management. The cessation of payment on the stoppage of the machine is essentially a penalty which the operator pays, sometimes justly for carelessness, but as frequently quite undeserved. The loss it entails falls less frequently on the expert operator, yet no operator is exempt.

A third factor influencing the amount of wage for both hand and machine workers is the dependence of one department upon another. The lasters depend upon the stitchers, the stitchers upon the cutters, the cutters upon the stock room, and the stock room waits to get out its leather in accordance with the order tickets from the office. However methodical may be the management, there are days when one department must wait upon another, or one lot of material be finished before another is on hand. No worker is sure she will have work for all the hours in any one day; in fact, women are not seldom seen reading or sewing while they wait for material to be supplied.

There is, fourth, the deduction of fines on account of spoiled or imperfect work. The skilled worker will be less affected by loss of this sort, nevertheless she will occasionally suffer from it. Just the amount per week or month nibbled from the wages by fines is difficult to determine for any special worker. In most factories the simple calculation of amount due, less the fines, is recorded on the pay roll, so that the actual wage is uncertain. Women privately interrogated as to their wage will seldom mention fines, unless to complain of

some special grievance. In the case of time workers payment is made by the hour or fraction thereof, so that fines for tardiness are not noted as such. In all factories fines are imposed for imperfect work, and these probably more than meet the wages of the fixers and repairers in the packing room.

CAUSES FOR VARIATION IN EARNINGS.

Among the conditions of the work itself the foregoing most strongly affect the wage. The amount of work on hand at different seasons, although it also affects the weekly wage, is more justly classed with the conditions upon which the annual earnings depend. It is evident from the data given that wages per week, even in the months of maximum employment, fluctuate to a surprising extent. Skilled, steady, and regular though the operator may be, the actual payment per week seldom touches the amount that, given all conditions favorable, is the potential wage. The tables below are illustrative of wage variation. They were chosen for a period of industrial activity and the workers were among the steadiest found on the pay roll.

TABLE 22.—VARIATIONS IN WAGES OF HANDWORKERS.

[Based on pay rolls.]

1. Three months' earnings for two women in the same factory, doing "turning."

Period.	Earnings in—		
	August.	September.	October.
A's earnings:			
First week	$6.23	$5.88	$3.15
Second week	6.65	6.93	4.76
Third week	6.65	6.65	7.21
Fourth week	7.39	4.13	5.37
Fifth week	5.32		
Average weekly earnings	6.45	5.90	5.12
B's earnings:			
First week	13.44	11.13	7.21
Second week	8.19	12.11	6.65
Third week	.14	10.71	12.67
Fourth week		6.16	9.10
Fifth week	9.52		
Average weekly earnings	6.26	10.03	8.91

TABLE 22.—VARIATIONS IN WAGES OF HANDWORKERS—Concluded.

2. Three months' earnings for two women in the same factory, doing "crippling."

Period.	January.		February.		March.	
	Number of days worked.	Earnings.	Number of days worked.	Earnings.	Number of days worked.	Earnings.
C's earnings:						
First week	6	$6.29	6	$6.56	6	$6.88
Second week	6	6.02	6	7.43	6	7.50
Third week	6	7.55	6	7.47	6	7.50
Fourth week	6	7.57	5	5.90	6	7.50
Fifth week	6	6.56	.....	.....	.....	.....
Average weekly earnings	.....	6.79	.....	6.84	.....	7.35
Average daily earnings	.....	1.13	.....	1.16	.....	1.22
D's earnings:						
First week	6	9.85	6	9.59	6	8.71
Second week	6	9.59	6	9.59	5½	8.43
Third week	6	9.59	6	9.50	6	9.23
Fourth week	6	9.59	6	6.33	6	9.50
Fifth week	6	9.59	.....	.....	.....	.....
Average weekly earnings	.....	9.64	.....	8.75	.....	8.97
Average daily earnings	.....	1.61	.....	1.46	.....	1.53

A, B, C, and D were handworkers employed in the same factory. For C and D the earnings are shown for the period of high activity, from January through March; for A and B, from August, usually the month of recovery after a dull season, through October. The number of days worked by A and B each week was not stated on the pay roll. Two legal holidays, however, made A's earnings low in the first weeks of September and October. B, on the contrary, earned $11.13, a wage above her average, in the holiday week of September. Irrespective of holidays, it will be seen that the fourth week of September was a low week for both; there was not full work to be had. The earnings of C and D show far more regularity, though even here the difference of nearly $1 between D's average earnings per week for January and February is a serious matter to one whose expenses must be closely fitted to earnings. Nor did D's average wage for March make up the loss in February. The pay roll does not show whether the loss of half a day in March was due to the worker's choice or to lack of work.

TABLE 23.—VARIATIONS IN WAGES OF MACHINE OPERATORS WORKING EVERY WEEK FOR THREE MONTHS.

Period.	January.		February.		March.	
	Number of days worked.	Earnings.	Number of days worked.	Earnings.	Number of days worked.	Earnings.
E's earnings (a vamper, 42 years old):						
First week	6	$14.50	6	$14.15	6	$13.11
Second week	5	11.87	6	14.78	6	16.66
Third week	6	16.00	5	12.36	6	18.04
Fourth week	5	9.50	6	15.96	6	15.88
Fifth week	6	15.00	.....	.....	.....	.....
Average weekly earnings	.....	13.38	.....	14.31	.....	15.92
Average daily earnings	.....	2.39	.....	2.48	.....	2.65
F's earnings (a tip stitcher, 24 years old):						
First week	5½	5.56	6	7.84	6	6.52
Second week	5½	7.56	6	7.67	6	7.63
Third week	6	8.12	1½	1.45	6	8.39
Fourth week	6	7.27	5	5.21	6	6.84
Fifth week	6	7.53	.....	.....	.....	.....
Average weekly earnings	.....	7.21	.....	5.54	.....	7.35
Average daily earnings	.....	1.24	.....	1.20	.....	1.23
G's earnings (a buttonhole operator):						
First week	6	14.53	6	15.06	6	9.71
Second week	6	10.88	6	14.12	6	15.77
Third week	6	9.93	6	11.45	6	18.10
Fourth week	6	16.01	6	11.65	6	20.00
Average weekly earnings	.....	12.84	.....	13.07	.....	15.90
Average daily earnings	.....	2.14	.....	2.17	.....	2.65

In Table 23 E and F were workers in the same factory; G was from a different locality. The period chosen was again one of high activity in both factories, a public holiday occurred but once in the three months, and the three operators were at work every week. The average weekly wage for E was about $2.50 more in March than in January. This was not merely because she lost two days in January and none in March, but because the two weeks in March showing highest earnings were weeks of most favorable industrial conditions. What wage should E reasonably have expected if all her weeks showed similar conditions? Since in three weeks of the period she earned about $16, it is not unfair to take that as representing the wage she might reasonably have expected, since in a week of unusual exertion in March it was exceeded by $2. For January, then, her average weekly wage was more than $2.50 below her earning capacity; in February $1.70 below, and in March nearly approached it. E was a steady, experienced worker. It will not escape notice that she worked but five days in the week twice in January; but it was not absence that made her wage below her earning capacity in 5 other weeks out of the 13.

F's wage shows much more variability, but this is not wholly due to her absences. She worked all the working days of March, yet showed a difference of $1.87 between her lowest and highest weekly

wage for that month. G, who worked the Reece buttonhole machine, earned $10 more in her best week than in her worst, and both occurred in the same month. Her wage of $18 is considerably below her highest, but how seldom she earned this is clear at a glance. What may be called her losses per week range from $2 to nearly $9.

Enough has been said to show that even among the steadiest workers the factors forming the basis of the wage vary so greatly from week to week as to make certainty about earnings impossible. F knows she will earn about half the money G does, and that is practically all she knows. G knows that when work is abundant and conditions favorable she may earn as much as $20 a week, but that under conditions which she is powerless to prevent her earnings may sink to less than half that sum. It is apparent both that it is very difficult for the worker to adjust her expenditures to her earnings, and that it is practically impossible for her to form a reliable estimate of what her yearly income is. As was said at the beginning of the chapter, estimates of average earnings, whether made by employer or employee, are apt to be wide of the mark in an industry where the weekly earnings show such variation.

CHAPTER V.—ANNUAL EARNINGS OF WOMEN SHOE WORKERS.

CONDITIONS AFFECTING EARNINGS.

With definite data on hand as to the weekly wage of individuals or of groups, it might seem logical to proceed at once to multiply this wage by the number of working weeks in the year and so obtain the annual earnings. For the office force in the shoe factory this can be done. We can ascertain the weekly rate of pay for clerk or stenographer, find that it is not cut down by a two weeks' vacation, and on the basis of 52 weeks of work we can readily calculate the yearly income. But as concerns earners in the workrooms, such a calculation is impossible. Two constant conditions forbid this simple arithmetical process—the seasonal fluctuation in the numbers employed, and the instability in factory workers as a class. Seasonal fluctuation in numbers is indicated by the difference between the numbers employed in times of maximum and minimum industrial activity, while the degree of instability in a working force is shown by the relation of the maximum number in any one week or month to the total number employed in any one year. As a result of both factors, few women work at shoemaking all the year round and few earn for the year the full amount indicated by a specified weekly wage.

SEASONAL FLUCTUATION IN NUMBERS.

Seasonal fluctuation, to take up the first condition, though always a feature of industrial production, has become in recent times so marked as radically to affect the whole life scheme of the factory classes. In most shoe factories it is now a recognized condition. It is not, it is true, in this industry subject to the extremes found in several other trades, yet the rise and fall in numbers employed is pronounced in the whole State, and the difference between maximum and minimum activity is considerable in any locality and very great in some. According to the State statistics for 1911, seasonal fluctuation in shoe factories is greater than that in any other leading industry except the confectionery and women's clothing industries. These similarities and differences for 11 leading industries of the State are shown in Table 24.

TABLE 24.—MAXIMUM AND MINIMUM NUMBERS OF ALL WAGE EARNERS EMPLOYED IN 11 LEADING MASSACHUSETTS INDUSTRIES IN 1911.

[Source: Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, pp. 2–12.]

Industry.	Maximum number employed.	Minimum number employed.	Per cent minimum is of maximum.
Cotton goods	118,366	94,701	80.0
Boots and shoes, leather	92,539	65,182	70.4
Woolen and worsted goods	55,979	40,562	72.5
Electric supplies	19,622	16,268	82.9
Paper and wood pulp	14,722	12,716	86.4
Hosiery and knit goods	10,826	8,476	78.3
Boots and shoes, rubber	8,581	7,602	88.6
Confectionery	7,533	4,880	64.8
Clothing, women's	7,014	4,113	58.6
Clothing, men's	5,841	4,494	76.8
Boxes, paper	4,784	3,557	74.4

Though the shoe industry may be classed with several of those listed above in the fact and in the amount of its general fluctuation, it is peculiar in the shifting from year to year of its seasons of high and low activity. It may be generally stated that the late fall or early winter months show the high tide of employment, with some stability through the winter, a rapid ebb in the early spring, partial recovery in the late summer, and irregularity in the early fall. However, the figures in Table 25, taken from the State statistics for a period of five years, show the danger of making even this general statement unreservedly.

TABLE 25.—FLUCTUATION IN NUMBERS IN MASSACHUSETTS SHOE FACTORIES IN MONTHS OF MAXIMUM AND MINIMUM EMPLOYMENT FOR A PERIOD OF FIVE YEARS.

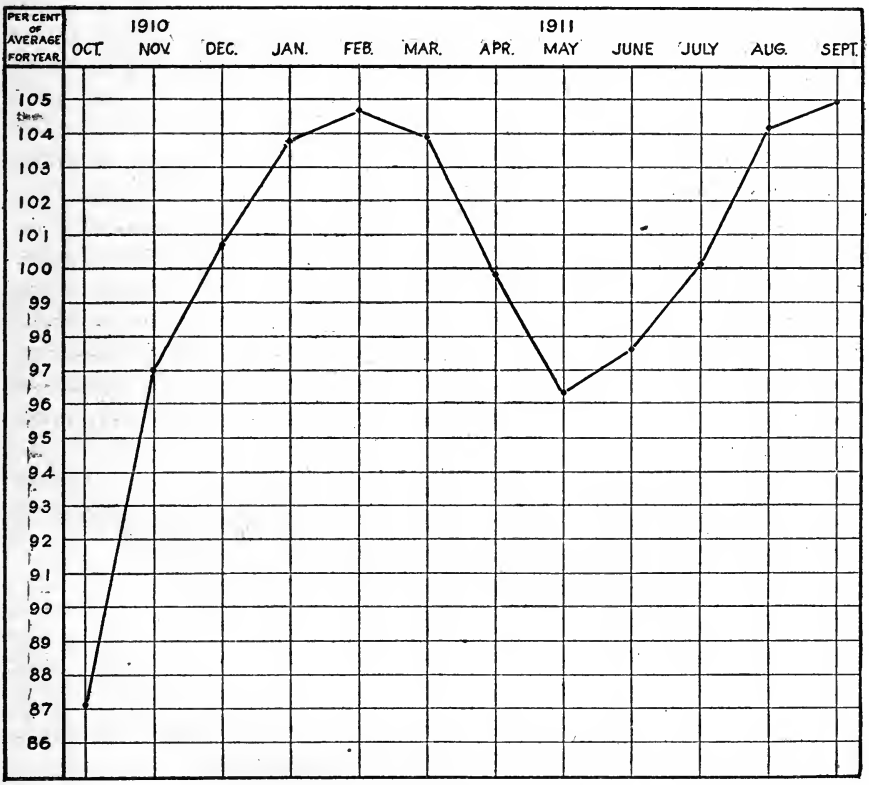
[Based on reports of the Massachusetts Bureau of Statistics.]

Year.	Maximum employment.		Minimum employment.		Difference in number employed in months of maximum and minimum employment.	
	Month.	Number employed.	Month.	Number employed.	Number.	Per cent.
1907	February	74,937	December	69,949	4,988	6.7
1908	September	71,780	June	62,075	9,705	13.5
1909	December	79,073	May	70,316	8,757	11.1
1910	February	82,707	October	67,489	15,218	18.4
1911	December	83,234	May	74,639	8,595	10.3

It will be noted that the decrease in the number of workers in the minimum month of 1907 was comparatively small; in the two succeeding years this per cent was about doubled, while in 1910 it was nearly three times that of 1907. In the latest report the difference in numbers between the months of maximum and minimum employment

is about 10 per cent of the maximum number. The increasing fluctuation for some years was apparently due to the rapid increase in manufacture; for the more recent reduction, better business organization is perhaps partly responsible, as well as the increase in product of certain large concerns doing business on a stock basis. The numbers here given for the whole State show smaller differences

WAGE EARNERS EMPLOYED IN SHOE FACTORIES IN MASSACHUSETTS EACH MONTH, 1910, TO SEPTEMBER, 1911, IN PER CENT OF AVERAGE FOR THE YEAR.



than may be found in various localities, in some of which the ups and downs are far more abrupt. Table 26 does, however, clearly illustrate the fact that between nine and ten thousand workers drop out of the industry at certain seasons, and shows also the dull and busy months. The table and the accompanying graphic chart show the fluctuations in numbers employed in the industry in the State each month, from October, 1910, to September, 1911.

TABLE 26.—NUMBER OF WAGE EARNERS EMPLOYED IN SHOE FACTORIES IN MASSACHUSETTS EACH MONTH, OCTOBER, 1910, TO SEPTEMBER, 1911.

[Source: Massachusetts Bureau of Statistics, Twenty-fifth and Twenty-sixth Annual Reports on the Statistics of Manufactures, 1910 and 1911, p. 56.]

Month.	Number of wage earners employed.	Per cent of the average for the year.
1910.		
October	67,489	87.1
November	75,185	97.0
December	78,052	100.7
1911.		
January	80,438	103.8
February	81,134	104.7
March	80,482	103.9
April	77,345	99.8
May	74,639	96.3
June	75,650	97.6
July	77,555	100.1
August	80,648	104.1
September	81,260	104.9
Average	77,490	100.0

The phenomenon of seasonal fluctuation in the shoe trade can not be explained by any single cause, but the most effective seems to be the system of manufacture. Two systems are in general use in the shoe trade. By the stock system the factory manufactures a certain amount of product each month and sells it to the buyer who comes to the factory. By the order system lots of shoes are made only to fill orders sent in by the traveling salesmen representing the firm and taking samples of its special products to the retailers. Many large factories maintain their own retail shops, placed in many towns and cities, thus creating, as well as filling, the demand for special shoes. The stock system prevails in many factories making a cheaper grade of shoe bought by consumers who dislike change in style or material. This is especially true for men's and boys' shoes sold in agricultural districts in all parts of the country. Some factories in the inland Massachusetts counties have made practically the same kind of shoe for workers in the field, or the same heavy boots for the lumbermen in the forest, for half a century. Their amount of work is about the same the year round, the working force shows little change in numbers, and they usually run every week in the year. The stability of the work is taken into account by the owner who puts his piece prices below those of factories run on the order system. He can do this the more safely, as stock work is ordinarily done in towns where no other industries are serious competitors and where the cost of living is less than in centers near the seaboard.

Seasonal fluctuation reaches its extreme in shoe factories using the order system. There is not, it is true, the dreaded short term of nerve-racking activity, as in the millinery trade in early spring and fall, or the rush time of the confectionery factories, with December's

number of girl workers showing a 54 per cent increase over July. The period of high employment for the shoe trade usually extends over the eight months from the first of August to the end of March. In the latter part of March a decided drop usually occurs, reaching its lowest point in the end of April, when many factories close altogether for stock taking. Through May and June there is a steady increase in the ranks of workers, and in the month of August more people are making shoes than in the month of January. At the end of September there is again another though far less decided drop for stock taking; but in the first week of December most shoe factories are at their busiest.

Under the order system, at present the prevailing method, marked seasonal fluctuation seems inevitable. The retailer before he orders must know what is likely to be the best seller; the manufacturer must wait for the orders from his traveling men. Between the rush of orders for winter boots and for summer shoes there is a period when both the retail shop and the factory are feeling their way. Orders come in slowly and the working force is reduced. Roughly speaking, then, the between seasons are early summer and midwinter; specifically, they may be any month for a factory worked on the order system. Factories making slippers or infants' shoes have their busiest season in the three months preceding Christmas, their dullest directly after. This is somewhat out of line with the ordinary shoe-factory season. The main cause of the recent general adoption of the order system is undoubtedly the rapid changes of fashion and the uncertainty in regard to the styles that will be used. In the centers manufacturing women's shoes, while it is known that high shoes will be worn more in winter and low shoes more in summer, the present demands as to material and cut vary surprisingly each season. Whether the ladies will favor, for the coming season, low shoes with two or three straps or a strapless pump is a vital question which must be settled by the retailer before he places his order with the factory. The uncertainty as to what will be the "taking" style for the coming season of sale operates to keep many factories idle or with a force greatly reduced until the orders come in all at once and a rush season begins. These changes affect most the high-grade shoes, yet even in the cheaper shoe some taking quality must balance the inferior material and finish. Even in men's shoes fashions vary, though to a less extent. The cut of the vamp changes, the buttoned and the laced shoe are favored alternately by "the younger set" to whose choice the high-grade factories must defer.

Not only does fluctuation in fashion create changes in the factory force as a whole, but it affects the individual operator, especially among the women. When the mode prescribes buttoned shoes for men or women, buttonhole operators and button operators are in

great demand, their payment per piece goes up, and hundreds strive to learn these special operations by the haphazard methods customary. The next season fashion chooses laced shoes, and the button and buttonhole operatives, thrown out of work, are dispiritedly seeking handwork or trying to learn the stitching processes.

The records of any factory of considerable output show two months, far apart in the calendar, which have a larger number of operatives than their neighbors on either side. These two periods of activity are characteristic, but it is quite as impossible to fix their occurrence for the individual factory from season to season as it is for the locality as a whole. All that can be predicted under the order system is that the busy season will begin when the orders arrive. Every important factory installs machines sufficient in number to meet the demand of the busiest weeks, and the expense of rental for idle machines must be reckoned in as cost in fixing the price of the product. Work on winter shoes usually begins in July and runs through the early fall; while the shoes for summer are largely made in the first three months of the year. Some of the larger firms do the bulk of their work in a few months and run slack the rest of the year. With their ample equipment, however, if they pick up large orders they can at any time call in their old hands and speedily finish a quantity of work. As a rule, fluctuation in numbers is sharpest in the large factories where big orders come in to be completed in a few weeks.

There are in Massachusetts eight legal holidays; these, together with the 52 Sundays, if deducted from the 365 days of the year, give 305 working days for the factory. Under the order system the power in most factories is running for 290 of these days, or for 50 working weeks, though not 50 full weeks. A common though not universal practice is to shut down factories altogether for stock taking during one week in April and another in November. The general situation is, however, made up of almost as many variations as there are factories. The system of manufacture, the kind of product, the special variety of that kind in an individual factory, even the character of the working force, shift the months and weeks of maximum activity in any one center around the calendar.

While the active seasons in no two localities are strictly contemporaneous, and while in any large center differences of product prevent corresponding periods of activity in the factories, yet a few local tendencies may be discovered. Lynn, for instance, shows the greatest seasonal fluctuation, and the finer the grade of shoe made the more the number of workers varies from month to month. This is because Lynn makes shoes for women, whose buying is dictated by the change in fashion. The busiest months vary greatly among the factories, while dull months generally coincide closely. For the Lynn industry as a whole, then, the busy times are indeterminate,

the dull season well marked. This condition, wherever it occurs, has an important bearing on both possible and actual annual earnings. Table 27 below shows typical variation in numbers employed for 13 factories in six localities.

TABLE 27.—MONTHS OF MAXIMUM AND MINIMUM EMPLOYMENT AND NUMBER OF WOMEN EMPLOYED IN 13 SHOE FACTORIES.

[Based on pay rolls.]

Locality.	Maximum employment.		Minimum employment.	
	Month.	Number employed.	Month.	Number employed.
Brockton:				
Factory A	August	183	April	111
Factory B	February	246	September	189
Factory C	October	171	May	137
Lynn:				
Factory A	March	416	July	361
Factory B	September	39	May	22
Factory C	January	254	July	221
Factory D	December	160	May	65
Beverly: Factory A	October	65	February	50
Marlboro:				
Factory A	September	383	November	258
Factory B	December	108	September	94
Chelsea: Factory A	January	409	May	303
Boston:				
Factory A	....do	33	April	14
Factory B	February	20	September	16
Total		2,487		1,841

INSTABILITY OF WAGE EARNERS.

Seasonal changes in the amount of work available in shoe factories, as in many others, augment instability in the working force. Nor is this instability in numbers merely; it means a shifting in the personnel of the wage earners connected with any one factory. This is most pronounced where the order system is most in use. In Lynn, for instance, the center of women's footwear, it was found that apparently but 18 per cent of the women listed worked the full number of weeks during which the factories were run. Whenever the months during which work will be maintained with some regularity in the factories of a group are not identical there is a natural endeavor on the part of the wage earners to prevent loss by shifting from one factory to another. It is usually an unprofitable expedient. Temporary relationship to any kind of work may increase experience and perhaps general ability, but general ability is at a discount in a closely differentiated trade; the quality desired is special expertness. In the new connection differences in method and product mean at least a temporary decrease in speed and therefore, for the piece-worker, decrease in wage. Again, though at a given time work in one factory may be scanty and in another abundant, a few weeks or even a week may reverse the situation. To make every week in the

year a wage-earning week is a baffling puzzle, and in the unsuccessful attempts to solve it restlessness, discouragement, and indifference to the quality of work naturally result. Nevertheless the effort is constantly made and there is in consequence a high degree of shifting from factory to factory. The varying amounts of instability are indicated in Table 28.

TABLE 28.—INSTABILITY OF WOMEN WORKERS BY RELATION OF MAXIMUM TO TOTAL NUMBERS EMPLOYED IN 1910 AND 1911 (MINORS INCLUDED).

[Based on pay rolls of 13 factories.]

Locality.	Number of women employed—		Per cent maximum number is of total.
	During the year.	In maximum week.	
Brockton:			
Factory A	324	198	61.1
Factory B	341	255	74.7
Factory C	265	184	69.4
Total	930	637	
Lynn:			
Factory A	767	442	57.6
Factory B	69	43	62.3
Factory C	637	291	45.7
Factory D	301	168	55.8
Total	1,774	944	
Marlboro:			
Factory A	523	386	73.8
Factory B	111	109	98.2
Total	634	495	
Beverly: Factory A	73	66	90.4
Chelsea: Factory A	773	421	54.5
Boston:			
Factory A	71	33	46.5
Factory B	20	20	100.0
Total	91	53	
Grand total	4,275	2,616	61.2

There is also migration from one shoe town to another in the same group, especially where train or trolley service makes transit easy. Lynn draws workers from Salem, Beverly, Peabody, Danvers, and even from Chelsea and Boston, and these towns in turn draw help for their factories from Lynn. In the Plymouth County group, Brockton is closely connected by the "electrics" with Whitman, Abington, and many outlying towns, most of which have shoe factories of their own. Marlboro, Hudson, and Framingham are more remote from cosmopolitan influence, and yet even here shifting in the working force is found as between town and village factories.

Instability, since it is for the most part characteristic of an unattached younger group of workers, is naturally less prominent among the women. It is the younger men and girls for the most part who

shift from factory to factory and from town to town. "Family" men and women reluctantly break industrial connection or change from one locality to another.

The best firms so clearly recognize the industrial disadvantage of a shifting personnel in their factory force that they take various means to lessen it as much as possible. In the outskirts of Boston a firm employing 5,000 operatives in the course of a year will not engage workers outside of an area within a few minutes walk or ride of the factory. This firm makes a good deal of stock product; it does not, however, give employment to the majority of its workers for the greater part of the year. Labor men claim that the smaller factory is better for a community. The fact that its smaller output must be more or less continuous in order to make a profit tends, they say, to steady the work, while the closer connection of interests between employer and employees tends to steady the workers.

Local differences in the shifting of women workers and in the degree of their unemployment are marked. For the purpose of ready comparison the total numbers of women in each of the four important centers studied have been divided into five classes according to the duration of their employment for the year. Class 1 comprises those who work every week in the year; class 2, the "steady workers," or those who are employed for 46 weeks or more; class 3, the "seasonal workers," who continue through or partly beyond the season of greatest activity, namely, 36 to 45 weeks, inclusive; class 4, the "extra force," working from 13 to 35 weeks during the active season; and class 5, the "temporary workers," who are connected with the factory 12 weeks or less.

In Marlboro, where the factories run continuously for 52 weeks in the year, the first two classes really merge into one. Since a large proportion of women work the whole 52 weeks, it has seemed more exact to put these into a separate class, which is represented by a very small per cent in Lynn, and in Brockton is not represented at all. The large proportion in the first two classes in Marlboro illustrates the fact that not only the system of work but also the character of the community affects the stability of the working force. Figures for Boston and Chelsea have not been given, because the factories studied in this locality differ so widely in size, in the systems of work, and in the conditions of their surrounding sections that they can not be considered as belonging to a class, however interesting they may be when studied separately. For the same reason Beverly is omitted from the statements for Lynn.

The proportion of "temporary workers," in class 5, differs widely in the three localities, its maximum being found in Lynn. This class is by no means made up of one element. The "temporary workers" are, in fact, broadly divided into the occasional and the unstable

classes. The former are skilled women, who go into the same factory season after season, work a few months at high wages, and retire into private life for the rest of the year. Their term of service, usually sought by the management, is voluntarily brief. The unstable class, on the other hand, form much the larger proportion, and is made up of various elements. Many, after a week or two of trial work, leave the factory in discontent; some continue longer on a low time wage, yet are of too little value to be retained. Many are "learners," who, convinced they are not getting on fast enough in one factory, carry their short experience as a supposed asset to another place. In all these cases the personal point of view shortens the time of employment. For the short term of service of the large remainder, the order system, with its varying demands as to numbers, is responsible.

Class 4, the "extra force," varies, according to locality, from over one-fifth to nearly two-fifths of the total number. Their period of employment varies from three to eight months and covers one or both of the two yearly periods of active production. These "extra" workers are often found in the factory from December or January through March, when many drop out for a few weeks, to come on again in August for the second busy period. In Lynn one-half of the "extra force," in Brockton, one-third, and in Marlboro, nearly the same proportion, work less than six months in the year.

For the "high season" workers in class 3 the proportion again is similar for the three centers, Marlboro taking the lead. The women in this class are largely skilled workers; in contrast to the class below, their relative numbers increase with the number of weeks, and more are employed over 40 weeks than under. In dull times, during stock-taking week or between orders, these valuable workers are often dismissed by relays, one stitching or packing room at a time, so that they may not drop connection with the factory.

There remains the group of "steady workers" made up of classes 1 and 2. In Marlboro these together make nearly 50 per cent of all the women workers; in Brockton, 40 per cent; and in Lynn, 27 per cent. The earnings of these two classes, and of these alone, may be taken to represent the actual annual income for women as shoe workers, for the other classes may, and sometimes do, work in other factories or at secondary occupations to fill up the idle weeks. Their supplementary earnings, whatever their source, can not be included in the income derived from shoemaking. A number of the young women, for instance, take a summer vacation as waitresses in seashore or mountain hotels.

In conclusion, the degree of instability characteristic of the shoe workers does not seem in any noticeable measure affected by labor organization, by the nature of the product, or by the proportion of

either sex among the wage earners. It is influenced to a certain extent by the size of a factory, by the economic status and the character of its workers, and by the local habits of a community. Strongest of all influences is undoubtedly the system of manufacture.

A fair presentation, then, of what women workers in the shoe industry may earn will include only the annual earnings of the "steady workers." The proportion of such workers in different factories grouped by special localities is given in Table 29.

TABLE 29.—PROPORTION OF ADULT WOMEN WORKING 46 WEEKS OR MORE IN THE YEAR IN 12 MASSACHUSETTS SHOE FACTORIES, AND THE CHIEF PRODUCT IN EACH FACTORY, CLASSIFIED BY LOCALITY.

Locality.	Chief product.	Total number of women employed in each factory.	Women working 46 weeks or more during the year at each factory.	
			Number.	Per cent.
Brockton:				
Factory A	Men's shoes	299	87	29.1
Factory B	do	292	151	51.7
Factory C	do	265	100	37.7
Total		856	338	
Lynn:				
Factory A	Women's shoes	722	240	33.2
Factory B	do	69	16	23.2
Factory C	do	637	131	20.6
Factory D	do	301	92	30.6
Total		1,729	479	
Beverly: Factory A	Men's and women's shoes	73	43	58.9
Marlboro:				
Factory A	Men's shoes	430	193	44.9
Factory B	Men's, women's, and children's shoes.	109	93	85.3
Total		539	286	
Chelsea: Factory A	Men's, women's, and children's shoes.	710	162	22.8
Boston: Factory A	Misses', children's, and infants' shoes.	130	5	3.8
Grand total		4,037	1,313	31.7
SUMMARY OF TABLE FOR THREE IMPORTANT CENTERS.				
Lynn		1,729	479	27.7
Brockton		856	338	39.4
Marlboro		539	286	53.1

The percentages of steady workers in the four Lynn factories studied are at once lower and more uniform than those of the other localities for which more than one factory is included in the table. In Lynn the average is about 28 per cent, and the highest percentage shown is 33.2 per cent. In Brockton the average is 39.4 per cent, in Marlboro 53.1 per cent, and the highest percentages found are, respectively, 51.7 per cent and 85.3 per cent. The prevalence of the order system in Lynn must be emphasized as a chief reason for its showing in this respect. Of the 30 factories visited in Lynn, two-

thirds use the order system, one-third both stock and order, though largely the former. Factory A, for instance, in the Lynn group shown in Table 29, maintains its own retail stores in many cities, and is therefore safe in making, as it does, a large quantity of stock product. Its per cent of steady workers is the highest for Lynn. Factories B, C, and D produce on the order system entirely.

The records for 24 Brockton concerns visited show 70 per cent using the order system. Factory A in Table 29 uses the order system altogether, the others both order and stock. Notwithstanding the fact that the management and conditions of Factory A in the Brockton group make work within its walls eagerly sought, its per cent of steady workers is lower than the average for Brockton. The product of Factory B in the Brockton group is made largely by the order system, 25 per cent only by stock. The majority of firms, however, using both systems divide the product fairly between the two, as is the case in Factory C. The two factories given for Marlboro together control nine-tenths of the industry of that town, where at present there are only two or three other small concerns. Factory A makes a cheap stock shoe in constant demand by workingmen, and sells by the job system to wholesale dealers. Factory B makes a better grade of shoe for men and women on the order system. Of the factories in Beverly, Chelsea, and Boston, the first works on the stock system and produces a cheap grade of shoe, the second by the order system altogether, as does also the Boston factory. Extreme instability in the working force was found in this Boston factory. A special product made by the order system must be held largely responsible for this.

Several facts of the first importance to women shoe workers are learned from Table 29. First, the average of steady workers for the 12 factories is about 32 per cent. While two or three towns where high fluctuation occurs, as Haverhill, Newburyport, and Worcester, are not here represented, their weight is balanced by a number of interior small towns producing goods on the stock basis and showing little variation in the numbers employed. On the whole, it is believed this proportion represents average conditions for the State. The total number of women working in Massachusetts shoe factories[1] (not including cut stock and shoe findings factories) in 1911 was 27,593. According to the findings of this study, about one-third, or 9,197, of these work 46 weeks or more in the year. Minors, forming less than one-half of 1 per cent of these steady workers, may be excluded from this discussion. As our records for those working 46 weeks or more include 1,300 adult women, we are in a position to quote earnings for a trifle over 14 per cent of the total number. Two-thirds of

[1] Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, p. 2.

these 1,300 women work in Lynn and Brockton, where the highest wages in the State in this industry are paid. The figures for earnings, then, make a favorable, though not an exaggerated, showing in comparison with the average for the State.

ANNUAL EARNINGS OF STEADY WORKERS.

It has been shown that the factories chosen for special study show so great a variety in management, product, and numbers as to make statistics drawn from their pay rolls a fair and reliable representation of women's earnings. The classified earnings presented in Table 30 may then be taken as a basis for discussion.

TABLE 30.—ANNUAL EARNINGS OF ADULT WOMEN WORKING 46 WEEKS OR MORE IN THE YEAR 1910–11, CLASSIFIED ACCORDING TO KIND OF WORK.

[Based on pay rolls of 12 factories.]

Earnings.	Workers receiving classified earnings.					
	Machine operators.		Handworkers.		Total number.	Per cent.
	Number.	Per cent.	Number.	Per cent.		
Classified annual earnings.						
$150 and under $200	5	0.6	6	1.4	11	0.8
$200 and under $250	16	1.8	12	2.9	28	2.1
$250 and under $300	42	4.7	31	7.4	73	5.6
$300 and under $350	66	7.4	46	10.9	112	8.5
$350 and under $400	96	10.8	76	18.1	172	13.1
$400 and under $450	141	15.8	70	16.6	211	16.1
$450 and under $500	127	14.2	66	15.6	193	14.7
$500 and under $550	117	13.1	36	8.5	153	11.6
$550 and under $600	107	12.0	28	6.7	135	10.3
$600 and under $650	60	6.7	21	5.0	81	6.2
$650 and under $700	37	4.1	9	2.1	46	3.5
$700 and under $750	23	2.6	11	2.6	34	2.6
$750 and under $800	23	2.6	5	1.2	28	2.1
$800 and under $850	14	1.6	2	.5	16	1.2
$850 and under $900	12	1.3	2	.5	14	1.1
$900 and under $950	5	.6	.....	.....	5	.4
$950 and under $1,000	.....	.....	.....	.....	.....	.....
$1,000 and over	1	.1	.....	.....	1	.1
Total	892	100.0	421	100.0	1,313	100.0
Cumulative annual earnings for all workers.						
1. Under $500	.....	.....	.....	.....	800	60.9
$300 or under	.....	.....	.....	.....	112	8.5
$400 or under	.....	.....	.....	.....	396	30.2
$450 or under	.....	.....	.....	.....	607	46.2
2. $500 and over	.....	.....	.....	.....	513	39.1
$550 and over	.....	.....	.....	.....	360	27.4
$600 and over	.....	.....	.....	.....	225	17.1
$700 and over	.....	.....	.....	.....	98	7.5
$800 and over	.....	.....	.....	.....	36	2.7
Total	.....	.....	.....	.....	1,313	100.0

Table 30 shows that 576, or 44 per cent, of the women earn $350 to $499 per annum. The earnings of this predominant midway group, if distributed throughout a year of 50 weeks, would make an average wage of $7 to $10 per week. It will here occur to the reader

that among those whose earnings are lower than this there must be a large number of women who work only 46 or 47 weeks in the year. This is so far from the case that the number working 50 to 52 weeks in the year forms by far the largest per cent, as shown by the following table:

TABLE 31.—ADULT WOMEN WORKING 46 WEEKS OR MORE IN THE YEAR DISTRIBUTED AS TO LOCALITY AND NUMBER OF WEEKS WORKED.

[Based on pay rolls.]

Number of weeks worked.	Women working specified number of weeks.							
	Brockton.		Lynn.		Marlboro.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
52	.....	.....	9	1.9	161	60.7	170	15.7
51	90	26.6	250	52.3	34	12.9	374	34.6
50	42	12.4	91	19.1	27	10.2	160	14.8
49	94	27.8	55	11.5	10	3.8	159	14.7
48	56	16.6	37	7.7	13	4.9	106	9.8
47	34	10.1	21	4.4	12	4.5	67	6.2
46	22	6.5	15	3.1	8	3.0	45	4.2
Total	338	100.0	478	100.0	265	100.0	1,081	100.0
SUMMARY.								
46 and under 50	206	60.9	128	26.8	43	16.2	377	34.9
50 and over	132	39.1	350	73.2	222	83.8	704	65.1
Total	338	100.0	478	100.0	265	100.0	1,081	100.0

Of the 65 per cent working 50 weeks or over a large number are the all-the-year-round workers in Marlboro. Excluding these there still remains a group of nearly 50 per cent who work 50 or 51 weeks in the year, a group scattered throughout all the centers studied, with local differences as to proportion. In Brockton no factory runs 52 weeks in the year, but its group of women working 50 weeks or over make up about 40 per cent of the steady workers; those working 48 or 49 weeks, 44 per cent. In Lynn the number working 50 weeks or more make 73 per cent, while in Marlboro the per cent rises above 80. In some of the scattered factories which can not be placed in a unified group the proportion working 50 weeks or more is very high, as in Chelsea, where in one large factory nearly 80 per cent of the steady workers work 50 weeks or more in the year.

It is apparent, then, that the small amount of the annual income can seldom be laid to loss occasioned by two to five weeks' absence from the factory during the time it is in operation. The average wage of the predominant group among the steady workers, namely, $7 to $10 for each of 50 weeks, as deduced from Table 30, should be compared with that of the predominant groups in Table 15, showing the average wage for all adult women in the week of maximum employ-

ment, where all five classes of workers are included. Here we find that 43 per cent of those working in the maximum week earned $10 or over, while 26 per cent earned $12 or over. This wage, if multiplied by the 50 weeks worked by the majority of steady workers, gives $500 to $600 or over per annum, as opposed to the $350 to $500 actually earned by the predominant group, according to the pay rolls. The lack of correspondence between wage and annual income becomes still more apparent when it is considered that the wage for "steady workers" in the week of maximum employment runs much above the average. In full weeks many of the "steadies" earn from $12 to $15, while a higher wage is by no means uncommon, yet the annual earnings of $600 to $750, which such weekly wages would imply, are gained by only a small proportion of these workers. There is a grave discrepancy here between potential and actual earnings.

This puzzling fact is explained by examination of certain factory pay rolls. In a few cases a record is kept not only of the number of weeks each earner worked, but also of her number of days or even half days in each week. In the case of time workers the management needs such a record to determine the wages each week; in the case of pieceworkers it is a device to increase the regularity both of work and workers. As a result of study of such records and of interviews with managers and workers alike it is found that even among steady workers there is a large amount of what may be called factory unemployment. Though a woman work every day of every week, she will not work full time each week nor earn her full potential income. On some days there will be no work at all, on others work for a morning only, and on still others so great an irregularity that during no part of the day is the worker fully busy or fully free. The employees may be personally responsible for a full week lost, but they are rarely so for the part weeks or part days of idleness. Under time and piece payment alike wages are cut down by a condition characteristic of a well-managed factory as well as of one poorly run.

Some typical examples of the time lost through want of continuous work are given in Tables 32 and 33. Table 32 relates to handworkers paid on a time basis in a factory running 51 weeks in the year. As a class these workers are economically more dependent than women in the stitching room who work at higher rates and may voluntarily leave off work at times.

TABLE 32.—UNEMPLOYMENT BY NUMBER OF WEEKS, DAYS, AND PART DAYS LOST FOR 23 TIME WORKERS IN LYNN.

[Based on pay roll.]

Occupation.	Nominal weekly wage.	Number of weeks worked.			Number of days lost.	
		Total.	Full.	Part.	Whole.	Part.
Packers:						
A	$10.50	51	22	29	23	24
B	10.50	51	36	15	8	9
C	10.50	51	27	24	17	22
D	10.50	50	25	25	13	26
E	10.50	50	29	21	20	20
F	10.50	50	22	28	12	32
G	10.50	49	27	22	14	19
H	10.50	48	27	21	15	20
I	10.50	47	23	24	12	23
Tack feelers:						
A	7.50	51	13	38	33	39
B	7.50	51	11	40	29	45
C	7.50	51	13	38	27	46
D	7.50	51	5	46	30	54
Blackers:						
A	10.50	51	24	27	13	35
B	10.50	51	21	30	13	44
C	10.50	48	20	28	20	35
Patent-leather repairers:						
A	10.50	51	9	42	30	33
B	9.00	51	22	29	16	26
C	10.50	51	31	20	13	16
D	10.50	51	37	24	15	10
E	9.00	50	19	31	16	28
F	10.50	50	28	22	30	18
G	9.00	47	23	24	49	16

The packers have a nominal wage of $10.50 a week, or $1.75 a day. For those working 50 weeks, the great majority, this should amount to $525 for the year. Packer E, however, has lost 20 full days and 20 half days, making 30 full days or 5 weeks in the year. Fifty-two dollars and fifty cents must then be deducted from her nominal annual earnings of $525. Packer I, whose 47 weeks of work should yield $493.50 for the year, has lost about 24 days, and must deduct $42 from her annual earnings, leaving $451.50 per year, or $9.60 per week. The tack feelers, who earn less, are in a worse case. They work every possible week, but seldom a full week. Tack feeler D, whose nominal wage is $7.50, has worked but 5 full weeks and has lost 57 days, the earnings for which must be deducted from her nominal annual earnings of about $382. Some of these days are public holidays. Were she a janitress, a waitress, or a bookkeeper, holidays would mean no loss of wage. Her actual loss, however, is about $71, leaving her $311 for the year, or $6.09 for each of her 51 weeks of work.

The same uncertainty as to the difference between actual and potential earnings prevails among the higher classes of workers in the stitching rooms. Table 33 shows unemployment for certain skilled machine operators in a large, well-organized factory drawing help from a stable population. The six months selected are those in which work was most active. The days lost in no instance occurred at the beginning or end of a term of service.

TABLE 33.—UNEMPLOYMENT BY NUMBER OF DAYS AND PART DAYS LOST FOR SKILLED MACHINE OPERATORS WORKING 6 CONSECUTIVE MONTHS OR 26 WEEKS IN THE MOST ACTIVE SEASON IN 1911.

[Based on pay roll.]

Occupation.	Number of weeks worked.			Number of days lost.	
	Total.	Full.	Part.	Whole days.	Half days.
Vampers:					
A	26	20	6	3	4
B	26	18	8	4	5
C	26	18	8	4	5
D	26	18	8	4	5
E	26	17	9	5	5
F	26	17	9	5	5
G	26	16	10	5	6
H	26	16	10	5	6
I	26	16	10	5	6
J	26	9	17	8	10
Top stitchers:					
A	26	21	5	2	4
B	26	21	5	2	4
C	26	20	6	3	4
D	26	19	7	4	4
E	26	19	7	4	4
F	26	17	9	5	5
G	26	12	14	7	5

Skilled stitchers not infrequently earn $18 to $20 in full weeks or $3 and over a day. The losses from this potential wage, due to factory unemployment, are serious enough even in the busiest season; in the slack season they mean in many cases serious deprivation.

The high-water mark of earnings is probably reached by the Brockton stitchers grouped in Table 34. They are under favorable circumstances as to factory management, labor organization, and rates of pay; yet when their annual earnings are distributed throughout the year it is found that a surprisingly large proportion earn less than the $9 a week which has been estimated as essential to a working woman's maintenance in Massachusetts.

TABLE 34.—CLASSIFIED EARNINGS FOR STITCHERS WORKING 46 WEEKS OR MORE IN THE YEAR IN BROCKTON.

[Based on pay roll.]

Annual earnings.	Average weekly wage for 52 weeks.	Number earning specified amount.	Per cent.
1. Under $500:	Under $9.60:		
$350 or under	$6.50 or under	2	4.3
$400 or under	$7.50 or under	4	8.6
$450 or under	$8.50 or under	13	28.3
$500 or under	$9.60 or under	19	41.3
2. $500 and over:	$9.60 and over:		
$500 and over	$9.60 and over	27	58.7
$550 and over	$10.50 and over	18	39.1
$600 and over	$11.50 and over	11	23.9
$650 and over	$12.50 and over	2	4.3
Total		46	100.0

The earnings of this group are not reached by the ordinary skilled worker. The pay rolls show that the women's annual earnings mean less than $9 a week for 40 per cent of the "steadies" in Brockton, for 62 per cent in Lynn, and for 75 per cent in Marlboro.

That the hours and days of unemployment are seldom due to voluntary absence is shown by comparing the pay-roll cards for a group of workers in the same factory. The shortage usually occurs either for the whole group or for so large a part of it as to make it evident that the cause was lack of work. Each pieceworker learns pretty accurately the number of pieces she can handle at a comfortable speed, but she does not know how many pieces she will be assigned on a given day, while she is equally uncertain as to the number of days or the number of weeks she will have normal work. It must be kept in mind that this is a fact in connection with steady workers, who can not supplement their earnings, yet who are as a class economically dependent upon them.

In summing up the results of this study of annual earnings, three points stand out prominently: The fluctuations in the industry, which debar many of the workers from steady employment; factory unemployment, or temporary lack of work for those who nominally are steadily employed; and, partly as a consequence of these periods of involuntary idleness, the low weekly wage, when earnings are distributed over the year, even of steady and experienced workers. The 1,313 women whose annual earnings are shown in Table 30 were adult, experienced, and steady workers, yet three-fifths of them earned less than $500 a year and not far from half (46.2 per cent) earned only $450 or less, and $450 a year means less than $9 a week. And what of the 2,963, or more than two-thirds of the women, employed in shoemaking who are not steady workers? Such are the significant findings of this investigation as to women's earnings. That these earnings exceed on the whole those of any other large body of factory workers is unquestioned. It is no less a fact that not even in the least expensive locality can they support a majority of the steady workers properly and healthfully.

CHAPTER VI.—SPECIAL CONDITIONS AFFECTING THE EARNINGS AND EFFICIENCY OF WOMEN WORKERS IN SHOE FACTORIES.

Among the matters that make up the complex whole of an industrial life are many arising from social and economic tendencies always unfixed and obscure. These must be left untouched in this incomplete study, nor, in fact, can any impartial investigator fail to admit that there is much underlying any industrial fact that no inquirer from the outside can hope to capture and analyze. Yet certain factors are too obviously related to women's status as wage earners to be ignored, although the data in connection with them are limited. These are the questions of sex, nationality, schooling, the employment of minors, and the organization of labor. The present study has realized the import of these factors, though unable to measure and weigh them except in a limited degree.

SEX AS AFFECTING EARNINGS.

The question of equal rewards for equal work for men and women has already been settled in the shoe factories by the method of piece payment. Where men and women are doing the same work they are paid at the same rate. But it is only in exceptional cases that they are doing the same work. It has been clearly pointed out by social economists that men and women, even when working under the same factory roof, are usually not competitors in a true sense. Women get lower pay than men for various reasons, but mainly because they are doing work of a lower grade. In the shoe industry the general rule is carried out, but it has conspicuous exceptions. Women's work is mainly in the stitching and packing room. It requires as much manual dexterity as that of the men, but less physical strength, and on the whole less mental ability. Therefore the whole scale of wages for women is lower than that for men. This is clearly shown in the following table:

TABLE 35.—NUMBER AND PER CENT OF MALE AND FEMALE BOOT AND SHOE WORKERS, AGED 18 OR OVER, EARNING CLASSIFIED AMOUNTS IN WEEK ENDING DECEMBER 16, 1911.

[Source: Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, p. 93.]

Classified weekly earnings.	Males.		Females.	
	Number.	Per cent.	Number.	Per cent.
Under $10	10,326	19.5	14,277	53.1
$10 but under $12	6,305	11.9	5,159	19.2
$12 but under $15	10,853	20.5	4,645	17.3
$15 but under $20	15,248	28.8	2,386	8.9
$20 but under $25	6,821	12.9	370	1.4
$25 and over	3,427	6.5	38	.1
Total	52,980	100.0	26,875	100.0

More than half the women earned under $10; very nearly half the men (48.1 per cent) earned over $15. The largest single group of women in the detailed table from which the above is condensed consists of those earning $10 but under $12; the largest single group of men consists of those earning $15 but under $20. Relatively this single group of men is larger than the combined groups of women earning $12 or over.

It has been seen in Chapter III that the division of the work between the sexes is in some processes a matter of habit and tradition, now beginning to be disregarded locally. The difficulty of obtaining enough women for the stitching room, together with the recent availability of foreign male help eager to do work that requires little physical activity, is gradually putting men at the sewing machines. This movement has made less headway in Massachusetts than in other States. In New York and Brooklyn large numbers of foreign-born Jews go into the clothing factories to learn machine stitching and then, as experienced stitchers, readily find places in shoe shops. American-born or Americanized men dislike working in the "women's rooms," while the American women as much dislike working in the men's rooms. Where both sexes are doing the actual processes in the same rooms one sex is generally of alien origin. In Massachusetts factories men in the stitching room are usually Jews, Greeks, Italians, or Armenians, all slender and agile races. The managers do not always introduce them willingly, but once they are in, defend their presence with much warmth. Men, they claim, can be placed closer together with less inconvenience, will do more work in a given time, and may be legally worked more than 54 hours a week at rush periods. These undoubted advantages will naturally give most of the better-paid places to men. Whatever the degree of skill and speed a woman in shoe factories may gain, she can not hope for earnings that measure up to those of the men workers of the same caliber.

The character of a local population, such as that of Chelsea, made up largely of foreign families, almost forces the employment of men stitchers. The more mature Jewish and Italian women are, as a rule, incompetent for stitching-room work, even if willing.

TABLE 36.—WAGES OF 82 MEN IN A STITCHING ROOM FOR WEEK OF MAXIMUM EMPLOYMENT.

[Based on pay roll.]

Number and per cent of workers.	Workers earning specified wage.								Total number of workers.
	Under $6	Under $8	Under $9	Under $10	Over $10	Over $12	Over $15	Over $20	
Number	1	5	10	10	72	58	30	7	82
Per cent	1.2	6.1	12.2	12.2	87.8	70.7	36.6	8.5	.....

The factory from which these data were taken has no labor union and pays comparatively low rates. The weekly wage for women is among the lowest noted. The proportion of men, however, earning $10 and over in the maximum week is almost half as large again as that of any group of women wage earners in the districts studied.

A comparison of average wages for groups of skilled machine operators of both sexes in this factory is given in Table 37.

TABLE 37.—COMPARATIVE WAGES FOR MEN AND WOMEN WORKING 45 WEEKS AND UNDER ON PIECEWORK IN A STITCHING ROOM IN CHELSEA.

[Based on pay roll.]

Occupation.	Number.		Average weekly wage.	
	Men.	Women.	Men.	Women.
Backstayers	9	8	$8.64	$8.13
Foxing stitchers	37	12	10.17	6.16
Top stitchers	6	5	9.38	8.61
Vampers	20	61	10.87	9.02

NATIONALITY AS RELATED TO INDUSTRIAL SUCCESS.

At first view it appears that nationality has a direct relationship to the amount of earnings, since the more highly paid ocesses are so largely done by native women. This relationship is only apparent. It is not a racial want of ability that keeps foreign women out. In the first place they are relatively few in number in Massachusetts shoemaking towns. Again, some factory managers claim the foreign woman immigrant can not understand or read the directions given to the stitchers. Others, but these are in low-grade factories, claim that reading directions is not a necessity. In some cases where foreign women have had school or industrial training they have proved skillful shoe workers. In Lynn a number of Italian women

are earning high wages in stitching rooms. In Brockton Swedish women are highly valued as stitchers and packers. In Marlboro French Canadians form a large proportion of the best-paid workers. Foreign-born women and girls in large numbers now perform the simple low-paid processes in the factories, not because of a natural unfitness for skilled work, but because they come to America under the pressure of an economic need. They are untrained and they must take what they can get without waiting for training. The foreigners now in the shoe factories probably will gain skilled positions as they gain education. In fact the organs of various factory trades point with warning to the fact that foreign girls and women are usurping the place of Americans in the more skilled factory operations. As yet this tendency, as we have seen, has not greatly affected the shoe factory stitching room. It still remains true that the un-Americanized foreign woman is seldom successful in the skilled processes.

EMPLOYMENT OF MINORS AS RELATED TO WOMEN'S EARNINGS IN SHOE FACTORIES.

In the preceding chapters the fact that the shoe industry depends very slightly on the labor of minors has been repeatedly emphasized. The State report for 1911[1] gives 7 per cent as the proportion of "young persons under 18" employed in shoe factories making the complete product. It is probable that this is too low a figure. The returns made by employers and based on the statements or misstatements of the children themselves often err, though not always by intention, in regard to the number of minor employees. In this inquiry it was found that the proportion of minors varied greatly with locality and with the nature of the product. The restrictions laid on the employment of minors by the labor unions in Brockton partly account for the large number who do not go to work until they are 15 or 16 years old. Whether the additional year or two of schooling makes the young people of Brockton more efficient as workers is a vital but unanswered question. In some factories no minors are employed; in others girls only; in a few boys only. Where both boys and girls work the numbers are pretty evenly divided between the sexes. Local differences in the proportion of minors are shown in the case of two large factories. In one, situated in the Brockton region, the proportion of minors reported in the month of maximum employment in 1910 was 3.3 per cent; the other, in Marlboro, a non-union center, reported over 10 per cent.

Special study of the status of minors was made in the course of this investigation in five large factories where girls are employed. Their proportion and ages are shown in Table 38.

[1] Massachusetts Bureau of Statistics, Twenty-sixth Annual Report on the Statistics of Manufactures, 1911, p. 93.

TABLE 38.—PROPORTION OF GIRL MINORS EMPLOYED IN FIVE LARGE SHOE FACTORIES IN MASSACHUSETTS IN 1911.

Locality.	Female employees.		
	Total number.	Girl minors.	
		Number.	Per cent.
Brockton (2 factories)....	669	74	11.1
Lynn (2 factories).....	1,404	71	5.1
Marlboro (1 factory).....	523	93	17.7

These figures refer to the total number at work during the year. The proportion found at any one time is much smaller, since instability is a marked characteristic of the younger workers. In the Marlboro factory 169 girls and boys were at work in the month of maximum employment in 1910–11, and but 54 in the minimum month. The minors are the first to be discharged when work is slack, and the readiest to be dissatisfied when it is pressing. They stream in a continuous current in and out of the factories.

Girls hold their positions somewhat longer than boys, but few minors of either sex work 46 weeks or more in the year. In the factory in Marlboro, where labor is abundant and tenacious of its place, 23 per cent of the boys and 26 per cent of the girls were "steady" workers, as against 41 per cent of the adult women. In the Brockton factory, the "steadies" made 20 per cent of the girls against 28 per cent of the women; in the Whitman factory 22 per cent of the girls and but 9 per cent of the boys worked 46 weeks in the year, while 52 per cent of the adult women were "steady." In Lynn, out of 35 boys and 45 girls in a factory employing nearly 2,000 hands, only one girl and not a single boy worked more than 44 weeks, and few more than 30 weeks.

As to age, the large majority of the girls and boys in the shoe factories are from 16 to 18 years of age. Child labor is practically nonexistent in this industry.

The work done by both boys and girls is almost exclusively handwork, or what may be termed footwork. The unskilled, unpleasant and dirty work at tables and the innumerable odds and ends and errands are assigned to the minors. Older girls in the packing or stitching room often work side by side with adults at elementary tasks.

As the industry is now organized, the employment of minors has little effect upon the number or earnings of skilled women working at piece rates. Doubtess it does displace a small proportion of needy but unskilled adult women. Superintendents in the shoe factories usually affirm that capable minors have a good chance for ad-

vancement. This seems too optimistic a statement, certainly so far as boys are concerned. According to the union officials there is now a surplus of skilled men workers, and admission to their ranks is jealously guarded. Moreover, in the rush season, foremen and forewomen dislike to be bothered with awkward workers, while in a dull season the experienced hands can scarcely be kept busy, so that the would-be learner has little chance at either season. A minor determined to remain in the shoe industry is peculiarly dependent on persistent effort for advancement.

RELATION OF WOMEN TO LABOR UNIONS.

Labor organization among shoe workers in Massachusetts, though even now far from complete, is a time-honored movement. Its history belongs to other branches of social study; we are concerned with its movements only in the direction in which they affect the status of women. The four localities chosen for study differ widely in respect to unionized labor. Brockton and Lynn, though very different in their methods of organization, are strictly union centers; Boston and its outlying suburbs are unorganized, but do not refuse members of unions; Marlboro will employ no union labor whatever.

Lynn and Brockton union officials, on whatever points they disagree, unite in lamenting the difficulty of holding women to a realization of the importance of organization for their own protection and the general good of the workers. The younger or low-paid workers especially grudge the weekly dues, while the mature steady women resent the expenditure of union money for the occasional association recreation. Few women comprehend the value of unions in standardizing wage or seek to utilize them in securing physical or moral sanitation in the shops. A reason frequently assigned by men for the indifference of women to the unions is that they do not look upon shoemaking as a life work. A more reluctantly stated cause is the social degradation assumed to follow membership in a union. This reason is strong in Brockton, possibly because women workers there are as a class socially superior to the men. The entrance of foreign men, mainly Jews, into the stitching rooms, and their compulsory membership in stitchers' unions has increased this feeling which prevails especially among Americans.

UNIONS IN BROCKTON AND ITS VICINITY.

In the southeastern towns of Massachusetts nearly all the shoe workers are members of the Boot and Shoe Workers' Union, an association affiliated with the American Federation of Labor. In no factory in Brockton and in few situated in surrounding towns can a nonunion man be employed. The various classes of operators are further organized into groups, as the Lasters' Union, the Vampers', the Cutters' Union, etc. All of these have delegates to the joint coun-

cil of the Boot and Shoe Workers' Union, which has a contractual relation with the manufacturers maintained in most instances for the past 10 or 15 years. The unions guarantee that there will be no strikes, the manufacturers, that they will maintain a price list fixed after joint conference. In Brockton the higher wage, good factory equipment, and permanence of business concerns are no doubt largely due to the intelligent and moderate management of the unions. The fact that the unions have to deal with a superior class of manufacturers, who reside among and respect their working force, must be given a large place in the accomplishment of these results. One or two factories have stood conspicuously apart in their refusal to employ union labor. The old town of Bridgewater had one of these—now discontinued; in it 90 per cent of the working force was foreign born. As the managers made a point of teaching processes, many workers went there for a time to learn, but left as soon as the processes were acquired to find work under better conditions.

Women are less completely organized than men, though in Brockton the Stitchers' Union No. 154 numbers 2,700 women. Some women belong to the Dressers' and Packers' Union and others to the Vampers' or Skivers' Unions. Altogether about four-fifths of the women in the Brockton district belong to unions. Dues for all members are 25 cents a week. Those who have been members for 6 months are entitled to a sick benefit of $5 a week for 13 weeks, and for members in good standing for 2 years there is a death benefit of $100. The officials of the chief women's unions complain of the lack of interest on the part of their membership and the difficulty of securing quorums for the fortnightly business meetings. The women's unions do nothing in the way of social recreation.

UNIONS IN LYNN AND ITS VICINITY.

In strong contrast to the unified labor in Brockton and its stable relation to the employers are the chaotic conditions in Lynn. The multiplication of labor organizations, their discordant views, their unconcerted action and their too frequent demands for alteration in labor conditions are assigned by many of the employers as causes of their opposition to unions. Within a dozen years several large firms have removed their plants to nonunion centers, where they rigidly maintain an open shop. Such a removal means great expense to the business, not only in the cost of a new plant, but in the loss incurred by settling amid a population untrained to shoemaking. It has been said that three generations are needed to make a shoe worker. This dictum bids fair to be disproved in its limited sense, but what may not be true of the individual may be generally true of a community.

Among the Lynn shoe workers there are 18 labor unions, 9 under the United Shoe Workers of America, 2 under the Knights of Labor, 5 locals of the Boot and Shoe Workers' Union, and 4 strong inde-

pendent unions. The two larger unions are the United Shoe Workers of America, including about 3,500 members, and the Boot and Shoe Workers' Union, including the entire force of three factories, amounting to between 500 and 600 workers. The agent of the Boot and Shoe Workers' Union estimates that there are, in the stitching rooms at Lynn, about 3,000 women, one-third of whom belong to some union. The Boot and Shoe Workers' Union has about 150 women members. This does not include the workers who work only during the rush time; they do not have to join the union even in a closed shop, but if they remain longer they are usually approached by the agent or forewoman and asked to join. It is claimed by the agent that the women do not take very much interest in the unions. At most of the meetings there are not more than 7 to 20 women present out of 150 members.

The agent of the Boot and Shoe Workers' Union claims that four-fifths of all the men employed in the shoe factories in Lynn are organized in unions and about one-third to one-half of all the women. Over 2,000 women are members of the United Shoe Workers of America, which controls eight factories in which the whole force are members and three others in which 90 per cent, including the women, are members. In two other large factories most of the men are organized, but only a few of the women. As a reason the secretary stated that in one of these factories the conditions have always been better than the average, and therefore the workers have not banded together for protection.

The secretary of the women's branch of the Boot and Shoe Workers' Union states that this union was established in March, 1903, and includes all the women workers in three factories. She asserts that the women are interested in the union; that the Americans and Irish take the most interest, and that few of the foreign women come to the meetings. The dues are 25 cents a week, and for members in good standing there is a sick benefit of $5 a week for 13 weeks and a death benefit of $100. Workers over 60 years of age are not admitted to the union. The rush help does not have to join, nor do the forewomen. The regular business meeting is held once a month, and there are no social meetings. The women in the towns surrounding Lynn are not organized, but a number of the men belong to unions as individuals.

Local Union No. 38 of the United Shoe Workers includes buttonhole operators, finishers, eyeleters, and buttoners. The first meeting was called December, 1907. The secretary states that 24 women workers met and organized, receiving hearty support from the Lasters' Union. The union was at first independent, but it has been affiliated with the United Shoe Workers of America for the past three years. The reason for organizing was the reduction in the price paid the women

working on the buttonhole machines, a change due to the displacement of the old Singer machine by the Reese buttonhole machine, now universally installed. The increase in the amount of work done per day in connection with the new machines caused manufacturers to cut prices repeatedly, until the women were forced to a protest. Under the rates now fixed by agreement with the unions, as much can be made per day as when the Singer machines were used, and often more. About 350 women and 24 men are members of this local union; only 20 workers eligible are not members. The secretary states that organization has done more for buttonhole operators than for any other class of workers in the whole shoe industry, and for this reason the union members are very enthusiastic. She asserts that the manufacturers have been square in their dealings and have cooperated with union officials in raising rates, which both sides realized were too low. So far as she knows the price list now in use on this special operation is the only graded price list of any shoe workers' union. The usual meetings of this union have from 10 to 30 members present; a meeting has never been dismissed for lack of a quorum. The United Shoe Workers pays $100 death benefit to the members of any of the local unions under its organization who have been in good standing for the year. There is, however, no sick benefit in their union, though whenever a member is sick fruit is sent every week. If a member needs financial help, a whist party or something of the kind is held to raise funds. There is a good deal of social activity in the union. About once a month they have a dance at which refreshments are served free. Members of the union and their escorts attend, and the executive members of other unions are invited. Two or three times a year the union has a public dance to which the admission charged is 25 cents. At these they frequently clear over $100.

An independent women's organization is the Buttonhole Operators' Union, formed a few years ago. Impetus to its formation was given by the fact that there are in Lynn many contract rooms in which only the buttonhole and eyeleting work is done, and their cheap contracts keep down the prices in the regular shops. The secretary stated that before the union was formed workers could not make more than $7 or $8 a week, since the prices paid were only 3 cents to 3½ cents per 100 holes. When the union was organized it raised the price to 5 cents per 100.

In Marlboro, as well as in some of the surrounding small shoe towns, the organization of labor was fairly complete before the year 1898. At that time an occasion of disagreement arose between employers and employees on a question of no very material interest, as is now conceded. The result, however, was a universal strike on the part of the local working force, finally broken by the importation of outside workers, many of whom were Greeks. The shoe factories

in Marlboro have been open shops since that date. The women workers struck with the men at that time, and have always, in Marlboro, been largely dependent on the action of the masculine element in the shoe-working force. In Boston, Jamaica Plain, Chelsea, and other shoe sections near Boston there are no union shops, and little effectively organized labor. Individuals may be members of unions, but the factory owners recognize and treat with no labor organization.

Table 39, which follows, gives the condition as to the labor organization in the industry in the chief localities studied. Labor men will point to the fact that the strongly organized centers, such as Lynn and Brockton, show the highest average wage. While the two conditions have doubtless a true relation, there are other factors which enter into the making up of the annual earnings; among them are the quality of the product, the proportion of women workers, and the fact that in fixing wages in any locality the cost of living must be considered. This cost in Lynn is far higher, for instance, than in Salem or Beverly, while it is much lower in Marlboro than in any of the seaboard shoe towns. The low wages in Boston and Chelsea are partly due to the character of the product, and the standards of living among the unskilled workers largely employed in its manufacture.

TABLE 39.—AVERAGE ANNUAL EARNINGS OF ALL WORKERS IN FOUR CENTERS IN MASSACHUSETTS, AND PER CENT OF WOMEN WAGE EARNERS, CHIEF PRODUCT, AND CONDITION AS TO LABOR UNIONS, 1910.

[Source: Massachusetts Bureau of Statistics, Twenty-fifth Annual Report on the Statistics of Manufactures, 1910, pp. 13–33, 42–49.]

Locality.	Average annual earnings.	Per cent of women.[1]	Chief product.	Condition as to labor organization in the industry.
Group I:				
Brockton	$691	26.7	Men's shoes	Strong central union.
Weymouth	679	28.9	do	Do.
Rockland	668	28.1	do	Do.
Group average	687			
Group II:				
Lynn	601	41.6	Women's shoes	Many separate unions.
Danvers	527	40.7	Children's and infants' shoes	
Salem	496	38.1	Women's and children's shoes	Partly organized.
Beverly	476	38.9	Women's shoes and slippers	Several local unions.
Marblehead	451	40.0	Children's and infants' shoes	
Group average	566			
Group III:				
Boston	532	40.5	Women's and children's shoes	No organized labor.
Chelsea	497	38.1	Children's shoes	A few local unions.
Group average	521			
Group IV:				
Milford	578	32.2	Men's and boys' shoes	Recently organized.
Worcester	575	41.0	Men's and women's shoes	Practically unorganized.
Natick	518	18.1	Men's and boys' shoes	No unions.
Marlboro	514	34.1	do	Do.
Hudson	511	33.1	Men's, women's and children's shoes.	Do.
Group average	529			

[1] Computed

CHAPTER VII.—RETROSPECT AND PROSPECT.

Among the features most prominent in connection with the class of women with which we have been dealing is their hitherto clearly defined and continuous relation to the industry. Whether this long-established connection will continue permanent is now a question. Shoes in all probability will be stitched so long as shoes are made, and women will, if they choose, be the stitchers. But will they choose? A few years ago the sewing machine was supposed no more essential in the factory than a woman to run it. But the increasing immigration to New England of Jewish men accustomed for generations to the sewing trades, and the more recent arrival of slender and light-handed races from the western edges of Asia, have brought new elements into the factory. The invasion has not been rapid, and the more skilled and remunerative processes still remain largely in the hands of American or Americanized workers. Still the employment of foreign men stitchers, who, when they displace the women, are found usurping the best paying occupations, is a menace to women's historic employment as shoe stitchers. Women of the better sort dislike the forced association with foreign men, and should the latter increase in the stitching rooms, the difficulty of inducing capable women to enter the factory will be greatly increased. As a result, manufacturers will be forced to discard them as dependable help. Some factory owners anticipate no rapid development in this direction; others look upon it as near and inevitable. Their diverse views are doubtless influenced by differing local conditions. But whether the progress of innovation be slow or rapid, it is certain that women no longer have exclusive control of an essential part of shoemaking and are, in consequence, less than formerly in a position to maintain or improve its conditions.

More important, perhaps, to those who consider the question of wages and hours the most significant in the study of an industrial class, will be the review of the facts presented with regard to the rewards of women's labor. Thirty thousand women in the month of high activity and from forty to fifty thousand during the year look to the shoe factory for a support, either partial or entire. Whatever may be the needs or motives of the temporary or occasional workers,

it is a logical conclusion, confirmed in numerous individual instances by the assertions of the women themselves, that the ten to twelve thousand who work the year round do so because of pressing necessity. The facts disclosed by this investigation in regard to the annual income of this class can not fail to cause grave concern when it is considered that it represents the high-water mark of earnings for factory women. Measured by a scale of expenditure frugally correspondent to their standards, the income of those wholly dependent on the factory varies from an amount barely sufficient to one so inadequate that the earnings must be considered supplementary, not sustaining. Many of these women belong to family groups or have husbands who are also wage earners. In such instances a woman's earnings will usually cover only her share of the joint family expenditure.

Is there any prospect of a change in the present status resulting in removal of the conditions chiefly responsible for the uncertainty and inadequacy of earnings? Radical alteration of the general situation seems unlikely, but important modifications of some of its phases have been suggested as possible by representatives both of capital and labor. Among the modifications suggested is the establishment of small plants, a movement which the freedom of the shoe industry from trust combinations renders especially practicable. The small concern has not the equipment necessary to execute large orders, and as its product is largely made on the stock system there is far less fluctuation in the numbers employed. As to large factories, it is claimed that better judgment on the part of traveling salesmen who obtain the orders and more intelligent management in the workrooms might secure a less uneven distribution throughout the year of the amount of work anticipated, and thus make it possible to increase the total output. If by these and other means seasonal fluctuation were largely modified, there would be marked reduction in the total number employed in the year, while the proportion of steady workers would be somewhat increased. The great benefit to the better class would be the lessening of the variation in weekly wage due to factory unemployment and a resulting augmentation of the total earnings for the year; but even were there little or no increase for the individual worker, the removal of a pronounced difference in the amount earned in months of maximum and minimum employment would be an incalculable advantage. To discount the future is a universal human tendency, and the woman who makes $12 or $15 a week in January finds one of the problems of her life so to calculate her expenditure as to provide for the scanty earnings of May. The failure to make this adjustment is a main cause of the debt-harassed condition of many of the skilled workers.

Another result of the reduction of seasonal fluctuation would be the lessening in the number of seasonal and occasional workers. This must undoubtedly work hardship to women whose husbands' earnings fail to meet legitimate family demands, and will mean distinct deprivation to the young girls who work a few weeks or months for the clothes their fathers can not afford to buy. The men of the family, its natural breadwinners, will feel more directly the burden of its support, and the younger women, if that support is not sufficiently ample, will desert the shoe factory for employments offering a lower but more continuous wage.

Seen in the broader survey, the women of the shoe factories, wherever they are centered, show characteristics which mark no other large industrial class so distinctively. Whatever may be their status as earners or their social position in their communities, that status and position are affected by no age-long heritage of ignorance or grinding toil, by no limitations of opportunity or restrictions placed upon freedom of choice in locality or occupation. The great stream of immigration from central and southern Europe (though for years flowing inward from the port of Boston) has as yet little affected the character of the shoe-working women, and the nonnative additions to their numbers have been, on the whole, in race and tradition kindred to the New England stock. In their ability and intelligence, in their relatively high earnings, in the permanence of their relation to the communities of which they form a part, in the uniformity of their social ideals and training, the Massachusetts shoe worker is the best that the twentieth century has produced of her type.

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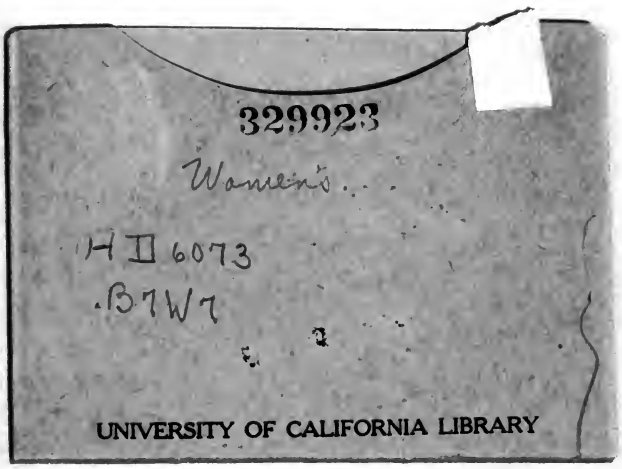
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